

Columbia University in the City of Aew York

TEACHERS COLLEGE

SCHOOL OF EDUCATION
SCHOOL OF PRACTICAL ARTS

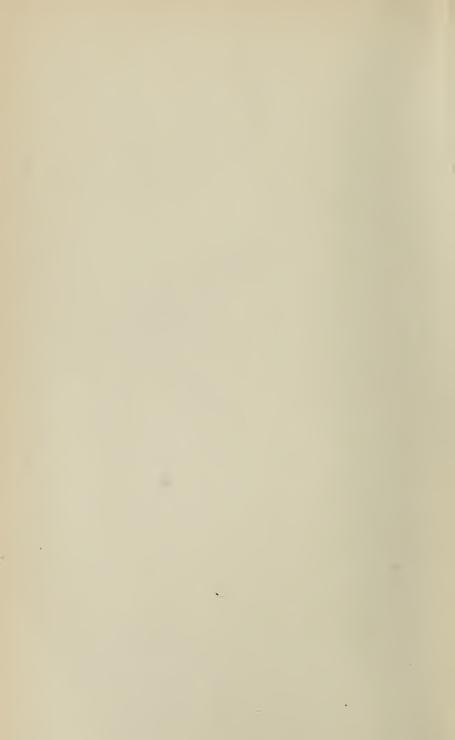
ANNOUNCEMENT 1919-1920

REGISTER OF STUDENTS 1918-1919

DEGREES AND DIPLOMAS CONFERRED 1917-1918

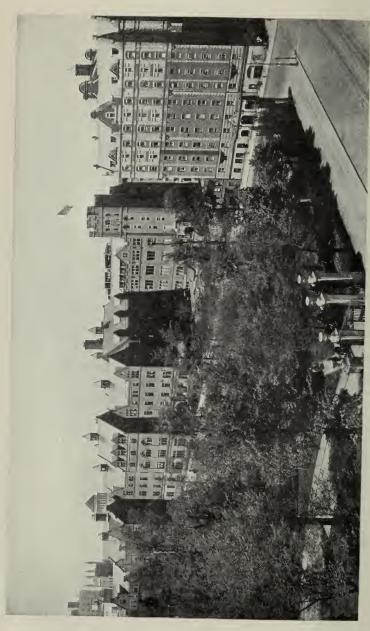
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TEACHERS COLLEGE BUILDINGS, SOUTHERN FRONT

Milbank, Macy and Main Buildings

(Speyer School, Horace Mann High School for Boys, and The Lincoln School are not shown) Household Arts Building

Whittier Hall (Dormitory)

Thompson

Horace Mann School



Columbia University in the City of New York

TEACHERS COLLEGE

SCHOOL OF EDUCATION

ANNOUNCEMENT

1919-1920

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New York City

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Professor Bigelow (1922)

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OFFICERS OF INSTRUCTION

I. FACULTIES OF TEACHERS COLLEGE

Faculty of Education

racuity of Daucation
NICHOLAS MURRAY BUTLER, Ph.D., Jur.D., LL.D., Litt.D President
JAMES EARL RUSSELL Dean and Barnard Professor of Education A.B., Cornell, 1887; Ph.D., Leipzig, 1894; LL.D., Dickinson, 1903; Colorado, 1905;
McGill, 1909
*Samuel Train Dutton Emeritus Professor of Educational Administration
A.B., Yale, 1873; A.M., 1900; LL.D., Baylor, 1912
JOHN FRANCIS WOODHULL
Franklin Thomas Baker Professor of English Language and Literature
A.B., Dickinson, 1885; A.M., 1889; Litt.D., 1908; A.M., Columbia, 1900
RICHARD ELWOOD DODGE Emeritus Professor of Geography
A.B., Harvard, 1890; A.M., 1894
¹ Frank Morton McMurry Professor of Elementary Education Ph.D., Jena, 1889
GONZALEZ LODGE
DAVID EUGENE SMITH
DAVID EUGENE SMITH
THOMAS DENISON WOOD
Paul Monroe
B.S., Franklin, 1890; Ph.D., Chicago, 1897; LL.D., Peking, China, 1913; Franklin, 1915
JULIUS SACHS Emeritus Professor of Secondary Education A.B., Columbia, 1867; A.M., 1871; Ph.D., Rostock, 1871
Frederick J. E. Woodbridge Johnsonian Professor of Philosophy
A.B., Amherst, 1889; A.M., 1898; LL.D., 1903; LL.D., University of Colorado, 1915
EDWARD LEE THORNDIKE Professor of Educational Psychology
A.B., Wesleyan, 1895; Harvard, 1896; A.M., 1897; Ph.D., Columbia, 1898
ARTHUR WESLEY DOW Professor of Fine Arts
ARTHUR WESLEY DOW
JOHN DEWEY
HENRY JOHNSON
MAURICE ALPHEUS BIGELOW
B.S., Ohio Wesleyan, 1894; M.S., Northwestern, 1896; Ph.D., Harvard, 1901

^{*}Died March 27, 1919 ¹Absent on leave, 1919–1920

CHARLES T. McFarlane Controller and Professor of Geography B.Pd., New York State Normal College, 1894; M.Pd., Michigan State Normal College, 1901; D.Pd., New York State College for Teachers, 1904

GEORGE DRAYTON STRAYER . . . Professor of Educational Administration A.B., Johns Hopkins, 1903; Ph.D., Columbia, 1905

Frederick Gordon Bonser Professor of Education B.S., Illinois, 1901; M.S., 1902; Ph.D., Columbia, 1910

¹ WILLIAM HEARD KILPATRICK Professor of Education A.B., Mercer, 1891; A.M., 1892; Ph.D., Columbia, 1912

CHARLES HUBERT FARNSWORTH Associate Professor of Music Student of music, Boston and Worcester; student of school music in England, 1894; France and Germany, 1909

ELIJAH WILLIAM BAGSTER-COLLINS . . . Associate Professor of German A.B., Brown, 1897; A.M., Columbia, 1898

THOMAS HENRY BRIGGS Associate Professor of Education A.B., Wake Forest, 1896; Ph.D., Columbia, 1914

² CLIFFORD BREWSTER UPTON Secretary and Associate Professor of Mathematics

A.B., Michigan, 1902; A.M., Columbia 1907

¹ANNA M. COOLEY . . . Associate Professor of Household Arts Education B.S., Columbia, 1903

PATTY SMITH HILL Associate Professor of Education Diploma, Louisville Kindergarten Training School, 1889

NICKOLAUS LOUIS ENGELHARDT Associate Professor of Education A.B., Yale, 1903; Ph.D., Columbia, 1918

FRANKLIN W. JOHNSON Associate Professor of Education A.B., Colby, 1891; A.M., 1894

VIRGIL PRETTYMAN Principal of Horace Mann School for Boys, with rank of Assistant Professor A.B., Dickinson, 1892; A.M., 1895; Pd.D., 1905

HENRY CARR PEARSON Principal of Horace Mann School, with rank of Assistant Professor

A.B., Harvard, 1892

HENRY ALFORD RUGER . . Assistant Professor of Educational Psychology A.B., Beloit, 1895; A.M., Chicago, 1905; Ph.D., Columbia, 1910

ROMIETT STEVENS Assistant Professor of Secondary Education B.S., Columbia, 1907; A.M., 1908; Ph.D., 1912

MARION REX TRABUE Assistant Professor of Education A.B., Northwestern, 1911; A.M., Columbia, 1914; Ph.D., 1915

WILLIAM ARTHUR MADDOX Assistant Professor of Education A.B., William and Mary, 1904; A.M., Columbia, 1911; Ph.D., 1918

¹ Absent on leave, Spring Session, 1919-20 ² Absent on leave for four months, 1919-20

WILLIAM ANDERSON McCall Assistant Professor of Education A.B., Lincoln Memorial University, 1913; A.M., Columbia, 1914; Ph.D., 1916

ELBERT K. FRETWELL Assistant Professor of Education A.B., La Grange, 1899; A.M., Brown, 1905; Ph.D., Columbia, 1917

LAVINIA TALLMAN Assist A.B., Vassar, 1904; A.M., Columbia, 1914 Assistant Professor of Religious Education

Mabel Carney Assistant Professor of Rural Education B.S., Columbia, 1918

LETA S. HOLLINGWORTH Assistant A.B., Nebraska, 1906; A.M., Columbia, 1913; Ph.D., 1916 . . . Assistant Professor of Education

EDWARD HARTMAN REISNER Assistant Professor of Education A.B., Yale, 1908; A.M., 1909; Ph.D., Columbia, 1914

(The following two advisers have seats, by invitation, in the Faculty of Education)

GEORGE ALBERT COE . Professor of Religious Education and Psychology, Union Theological Seminary A.B., University of Rochester, 1884; A.M., 1888; LL.D., 1909; S.T.B., Boston, 1887; Ph.D., 1891

Associate in Education WARREN H. WILSON A.B., Oberlin, 1890; A.M., 1894; D.D., 1916; Ph.D., Columbia, 1907; D.D., Tusculum College, 1912

Faculty of Practical Arts

NICHOLAS MURRAY BUTLER, Ph.D., Jur.D., LL.D., Litt.D. . . President James Earl Russell Dean and Barnard Professor of Education A.B., Cornell, 1887; Ph.D., Leipzig, 1894; LL.D., Dickinson, 1903; Colorado, 1905; McGill, 1909

Professor of Physical Education

1807

ARTHUR WESLEY DOW . Professor of Fine Arts Professor of Fine Arts. Professor of Fine Arts. Pupil of Boulanger, Lefebvre, Doucet, and Delance; exhibitor in Salons of 1886, 1887, 1889; honorable mention, 1889; medals, Mechanics' Exhibition, Boston; Pan-American Exposition, Buffalo

MARY ADELAIDE NUTTING Professor of Nursi Diploma, Johns Hopkins Hospital Training School for Nurses, 1891 . . Professor of Nursing and Health

MAURICE ALPHEUS BIGELOW Professor of Biology and Director of School of Practical Arts B.S., Ohio Wesleyan, 1894; M.S., Northwestern, 1896; Ph.D., Harvard, 1901

FREDERICK GORDON BONSER Professor of Education

Student of music, Boston and Worcester; student of school music in England, 1894; France and Germany, 1909

¹ CLIFFORD BREWSTER UPTON . . . Secretary and Associate Professor of Mathematics

A.B., Michigan, 1902; A.M., Columbia, 1907

MAY B. VAN ARSDALE Associate Professor of Household Arts B.S., Columbia, 1905

¹ Absent on leave, for four months, 1010-20

ANNA M. COOLEY . . . Associate Professor of Household Arts Education B.S., Columbia, 1903 MARY SWARTZ ROSE Associate Professor B.L., Denison, 1901; B.S., Columbia, 1906; Ph.D., Yale, 1909 . Associate Professor of Household Arts JESSE FEIRING WILLIAMS Associate Professor of Physical Education A.B., Oberlin, 1909; M.D., Columbia, 1915 HERMANN T. VULTÉ Assistant Professor of Household Arts Ph.B., Columbia, 1881; Ph.D., 1885 WILLYSTINE GOODSELL Assistant Professor of Education B.S., Columbia, 1905; A.M., 1906; Ph.D., 1910 JANE FALES Assistant Professor of Household Arts B.S., Columbia, 1907 AZUBAH JULIA LATHAM Assistant Pr A.B., Boston, 1888; diploma, School of Expression, Boston, 1890 Assistant Professor of Speech Assistant Professor of Fine Arts ALON BEMENT . Assistant Professor of Fine Arts Diploma, Boston Museum School of Fine Arts, 1896; Nääs Institute, Sweden, 1898; student, Ecole des Beaux-Arts, Paris, 1900-02 CHARLES WILLIAM WEICK Assistant Professor of Industrial Arts B.S., Ohio State University, 1898 ² BENJAMIN R. ANDREWS Assistant Prof A.B., Cornell, 1901; A.M., 1903; Ph.D., Columbia, 1909 . Assistant Professor of Household Arts ² Allan Abbott Assistant Professor of English A.B., Harvard, 1896; A.M., 1911 Annie W. Goodrich Assistant Professor of Nursing and Health Diploma New York Hospital Training School for Nurses, 1802 MARY THEODORA WHITLEY Assistant Professor of Education B.S., Columbia, 1905; A.M., 1906; Ph.D., 1911 Assistant Professor of Biology CLIFFORD D. CARPENTER Assistant Professor of Chemistry B.Pd., Michigan State Normal College, 1905; A.B., 1906; Ph.D., University of Chicago, 1915 CORA MARGUERITE WINCHELL . Assistant Professor of Household Arts Education B.S., Columbia, 1909 . . . Assistant Professor of Household Arts Emma H. Gunther B.S., Columbia, 1911; A.M., 1915 J. Montgomery Gambrill Assistant Professor of History A.M., Columbia, 1913 Anna Woods Ballard Assistant Professor of French A.B., Toronto, 1900; A.M., 1913; diplomas in French and German, Association phonétique internationale, 1908 WILHELMINA SPOHR Assistant Professor of Household Arts B.S., Kansas State Agricultural College, 1897; B.S., Columbia, 1914; A.M., 1917 ISABEL MAITLAND STEWART Assistant Professor of Nursing and B.S., Columbia, 1911; A.M., 1913

B.S., Columbia, 1919; student, Paris, 1913–14; exhibitor in Salon, 1914

. . . Assistant Professor of Fine Arts

. . Assistant Professor of English

A.B., Smith, 1899; Ph.D., Columbia, 1912

CHARLES J. MARTIN . . .

ELIZABETH C. COOK.

¹ Absent on leave, Spring Session, 1919–20 ² Absent on leave, Winter Session 1919–20

II. OTHER OFFICERS OF INSTRUCTION

Professors in Other Faculties

CHARLES SEARS BALDWIN Professor of Rhetoric and
English Composition in Columbia University
A.B., Columbia, 1888; A.M., 1889; Ph.D., 1894
Julius August Bewer Professor of Old Testament History and
Theology in Union Theological Seminary
B.D., Union Theological Seminary, 1898; Ph.D., Columbia, 1900
RUSSELL BURTON-OPITZ Associate Professor of Physiology in Columbia University
in Čolumbia University
M.D., University of Chicago, 1895; B.S., 1898; M.S., 1902; Ph.D., 1905
ROBERT EMMET CHADDOCK Associate Professor of Statistics
in Columbia University

A.B., Wooster College, 1900; A.M., Columbia, 1906; Ph.D., 1908
GEORGE PHILIP KRAPP Professor of English in Columbia University
A.B., Wittenberg, 1894; A.M., 1897; Ph.D., Johns Hopkins, 1899

Associates

WILLIAM EDWIN BRECKENRIDGE A.B., Yale, 1893; A.M., 1902	Associate in Mathematics
WALTER H. EDDY	Associate in Physiological Chemistry

B.S., Amherst, 1898; A.M., Columbia, 1908; Ph.D., 1909

EDWARD S. EVENDEN Associate in Educational Administration A.B., Stanford, 1910; A.M., 1911

B.Mus., Yale, 1902

I arran C America

Instructors

Instructor in Vindorgarton Education

B.S., Columbia, 1912
MATTHEW GRUENBERG BACH Instructor in German A.B., Trinity, 1910; A.M., Columbia, 1911
EMMA R. BAKER
Lydia Ray Balderston Instructor in Household Arts B.S., Columbia, 1911: A.M., 1915
LAURA IRENE BALDT Instructor in Household Arts B.S., Columbia, 1910
HARRIET THOMPSON BARTO Instructor in Household Arts A.B., University of Illinois, 1916; A.M., Columbia, 1917

A.B., University of Illinois, 1916; A.M., Columbia, 1917

CLYDE A. BOWMAN Instructor in Industrial Arts B.S., Columbia, 1915

GRACE L. Brown Instructor in Kindergarten Education B.S., Columbia, 1916

AGNES BURKE Instructor in Kindergarten Education B.S., Columbia, 1913

CLARA FRANCES CHASSELL Instructor in Experimental Education A.B., Cornell College, 1912; M.Di., Iowa State Teachers College, 1913; A.M., Northwestern University, 1914

ERICA CHRISTIANSEN Instructor in Household Arts Education B.S., Columbia, 1917

GERTRUDE K. COLEY
ANNA COLMAN
ALICE E. CONWAY Instructor in Household Arts B.S., Columbia, 1918
MARGARET ZERBE COWL Instructor in Music Diploma, Teachers College, 1903; student, piano music, in France and Germany; pupil of E. A. McDowell, Raphael Joseffy, and Harold Bauer
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MARIE GRACE DASCHBACH Instructor in Music Pupil of John Dennis Mehan
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HELEN ELIZABETH DILLER Instructor in English B.S., Columbia, 1914; A.M., 1916
PERMELIA M. DOTY Instructor in Nursing and Health B.S., Columbia, 1917
FANNIE WYCHE DUNN Instructor in Rural Education B.S., Columbia, 1915; A.M., 1917
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A.B., Brown, 1904; A.M., Columbia, 1910 LEHA TOUNGON LINE A
LEILA JOHNSON

FLORENCE M. LA GANKE Instructor in Household Arts Student, Teachers College, 1909–10, 1912–13
HELEN LATHAM
JANET ROWLAND McCastline Recorder in Physical Education A.B., Columbia, 1902; A.M., 1905
NELLIE McCown Instructor in Household Arts Education Diploma, Stout Institute, 1911
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MAUD MARCH
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Annie E. Moore Instructor in Elementary and Kindergarten Education
B.S., Columbia, 1910; A.M., 1915
Lois Coffey Mossman Instructor in Education B.S., Columbia, 1911
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BELLE NORTHRUP Instructor in Fine Arts Student, Academie Moderne, Paris, 1914; B.S., Columbia, 1917
SARAH SINCLAIR ORMSBY Instructor in Household Arts Education Diploma, Hackley Manual Training School, 1909
SARA LYMAN PATRICK Instructor in Industrial Arts Education B.S., Columbia, 1913; A.M., 1916
MARY HENLEY PEACOCK Instructor in Household Arts Ph.B., Earlham, 1898; diploma, Drexel Institute, 1901
MARY EVERETT RANKIN Instructor in Kindergarten Education B.S., Columbia, 1913
BERTHA E. SHAPLEIGH Instructor in Household Arts Diploma, Boston Cooking School, 1896
CHARLES F. SMITH Instructor in Scouting B.S., Columbia, 1908
Lydia Southard Instructor in Household Arts A.B., Wellesley, 1899
CAROLINE E. STACKPOLE Instructor in Biology B.S., Columbia, 1906; A.M., 1907
CORNELIA H. STONE Instructor in Household Arts A.B., Wesleyan University, 1897
SALLIE B. TANNAHILL Instructor in Fine Arts B.S., Columbia, 1915
EVELYN SMITH TOBEY Instructor in Household Arts B.S., Columbia, 1908
B.S., Columbia, 1908 MARY EVELYN TOWNSEND Instructor in History
B.S., Columbia, 1908 MARY EVELYN TOWNSEND
B.S., Columbia, 1908 MARY EVELYN TOWNSEND
B.S., Columbia, 1908 MARY EVELYN TOWNSEND A.B., Wellesley, 1905; A.M., Columbia, 1917 CHARLES BABCOCK UPJOHN Pupil of Olin L. Warner and Karl Bitter SADIE B. VANDERBILT B.S., Columbia, 1919 BESSIE SCOTT WHITE Instructor in Household Arts Instructor in Household Arts

Lecturers

EVA ALLEN ALBERTI Lecturer in Physical Education A.M., Alfred University
S. JOSEPHINE BAKER Lecturer in Nursing and Health M.D., Woman's Medical College of the New York Infirmary, 1898; D.P.H., New York University, 1917
Anna Barrows Lecturer in Household Arts Diploma, Boston Cooking School, 1886
EVELYN LAWRENCE COLLINS Lecturer in Nursing and Health Kindergarten certificate, Teachers College, 1891
ELIZABETH E. FARRELL Lecturer in Educational Psychology B.S., New York University, 1906
EUGENE GIBNEY
ALFRED MORTON GITHENS Lecturer in Household Arts B.S., University of Pennsylvania, 1896
CLEMENT HEATON Lecturer in Fine Arts Student of Burlison and Grylls, London; student of Bodley and Garner, London
SUSAN JOHNSON Lecturer in Nursing and Health Student, Normal School, Berkeley, California; Student, University of California
HAROLD BROWN KEYES Lecturer in Physical Education A.B., Yale, 1908; M.D., Columbia, 1910
EDWARD M. LEHNERTS Lecturer in Geography B.S., University of Pennsylvania, 1902; A.M., University of Minnesota, 1908
MATILDA J. MCKEOWN Lecturer in Household Arts B.S., Columbia, 1910; A.M., 1916
HORACE MORAN
LINETTE ALTHANA PARKER Lecturer in Nursing and Health B.S., Columbia, 1912
Frank C. Panuska Lecturer in Industrial Arts B.S., Columbia, 1918
MAY KIRK SCRIPTURE Lecturer in Speech In charge of Speech Clinic, Vanderbilt Clinic, College of Physicians and Surgeons
WILLIAM L. SOMERSET Lecturer in Nursing and Health A.B., Wesleyan, 1881; A.M., 1884; M.D., Columbia, 1892
HENRY W. THURSTON Lecturer in Nursing and Health A.B., Dartmouth College, 1886; Ph.D., Columbia, 1918
CLARE TOWSLEY Lecturer in Nursing and Health A.B., Oberlin, 1911
LILLIAN D. WALD Graduate, New York Hospital Training School for Nurses; LL.D., Mount Holyoke, 1912
CHARLES WARDLAW Lecturer in Physical Education A.B., University of North Carolina, 1906
ELI W. WEAVER Lecturer in Vocational Guidance A.M., New York University, 1904
MAY JOSEPHINE WIETHAN Lecturer in Music Paris, 1906-07; A.C.M. (Honorable Associate of the College of Musicians), 1907; Royal College of Music, London, 1907-08
CHARLES-EDWARD A. WINSLOW Lecturer in Public Health B.S., Massachusetts Institute of Technology, 1898; M.S., 1899; A.M., Yale, 1915; D.P.H., New York University, 1918
EMMA A. WINSLOW Lecturer in Household Arts

Lecturers and Instructors in Special and Extension Classes

FRANCES V. HALLOCK Instructor in Speech Student, Teachers College, 1915–16

CHRISTINE WARNER NELSON Instructor in Household Arts Student, Pratt Institute, 1910–12; Teachers College, 1914–16

CLARENCE HUDSON WHITE Instructor in Fine Arts Honorary member, Camera Club, New York; corresponding member, Vienna Camera Club; one of the founders of the Photo-secession

Assistants

C. ISABELLE ATKINSON Assistant to College Physician R.N., St. Luke's Hospital Training School for Nurses, 1902

WILLIAN WATSON BEAUMONT Assistant in Music and Speech B.M., Montana College, 1914; B.S., Columbia, 1918

ELMA BENTON Assistant in Secondary Education A.B., University of Minnesota, 1910; A.M., Columbia, 1918

BLANCHE LOUISE BIRCH Assistant in Kindergarten Education A.B., Wellesley, 1902; A.M., Columbia, 1918

SIMON BRANDSTADTER Assistant in Physical Science B.S., College of the City of New York, 1914

LAURA MERRILL CHASSELL Assistant in Educational Psychology A.B., Cornell College, Iowa, 1912; M.Di., Iowa State Teachers College, 1913; A.M., Northwestern University, 1914

MARY WROE CURTIS Assistant in Household Arts Student, New York School of Applied Design for Women, 1902–03; Teachers College, 1905–07

KATHERINE GRAVES Assistant in Educational Psychology A.B., Vassar, 1917

NELL ZENIA HAWKINSON Assistant in Nursing and Health Diploma, Framingham Hospital Training School for Nurses, 1909; B.S., Columbia, 1919

FLORENCE E. HOUSE Assistant in Industrial Arts Education B.S., Columbia, 1915; A.M., 1918

MORRIS MEISTER
J. CAYCE MORRISON Assistant in Secondary Education A.B., Valparaiso University, 1912; B.S., Columbia, 1915; A.M., Columbia, 1916
MARGARET RITCHIE Assistant in Chemistry B.S., Columbia, 1918
ETHEL M. ROBINSON Assistant in Kindergarten Education B.S., Columbia, 1917
MARY E. TURNBULL
MARGARET E. TUTTLE Assistant in Physical Education
ELEANOR F. WELLS Assistant in Household Arts Diploma, Framingham State Normal School, 1910; student, Teachers College, 1913-14
Lecturers Specially Appointed for War Service Courses
George Amsden, M.D. Harriet Barnes, R.N. William F. Bender, M.D. H. B. Blackwell, M.D. Otology Robert Campbell J. Alexander Clarke, M.D. George C. Diekman, M.D. Emily Edmunds Lina Eppendorff A.P. Evans, M.D. Alexander A.P. Evans, M.D. Alerapy Albert Heckman Gariet Mary Johnstone Charles I. Lambert, M.D. Therapy Nathaniel Mills, M.D. Therapy William K. Mittendorf, M.D. Therapy William K. Mittendorf, M.D. Therapy William E. Russell, M.D. Therapy William E. Russell, M.D. Therapy Sumner Shaller, M.D. Therapy Sumner Shaller, M.D. Frederick W. Smith, M.D. Special Diseases F. B. Weller, D.D.S. Dentistry Lieutenant Wierzbricki, U.S.N. Clerical Duties

III. HORACE MANN SCHOOLS

Officers of Administration

JAMES E. RUSSELL, LL.D Dean of Teachers College VIRGIL PRETTYMAN, D.Pd Principal of Horace Mann School for Boys
HENRY CARR PEARSON, A.B Principal of Horace Mann School
CHARLES W. HUNT, A.M Vice-Principal, Horace Mann School
CHARLOTTE GANO GARRISON, B.S Principal of Kindergarten
MARION ROOT PRATT : Secretary
HAROLD BROWN KEYES, M.D
AMY LOGAN, B.S Assistant to Principal, Girls' High School
Anna Augusta Jones Secretary of Boys' High School
CONSTANCE F. BURR Secretary of Girls' High School
HELEN CRISSEY Secretary of Elementary School

LILLIAN RANDEL Librarian of Boys' High School Helen Jeanette Moss Librarian of Cirls' High School Heads of departments in Teachers College are supervisors of their respective subjects in the Horace Mann Schools.

Teachers in Horace Mann High School

KATE STUART ANTHONY Student, Providence, R. I., Training School, 1893-94; Pratt Institute, 1896-97; Columbia, 1898-99 GEORGIA FARRAND BACON B.S., Michigan, 1896 CHARLES MCCOY BAKER A.B., Dickinson, 1893; A.M., Harvard, 1905 HELEN BARTLETT BAKER A.B., Villanova College, 1915 Assistant in Physical Education Diploma, Savage School of Physical Education, 1917 PAUL E. BELTING A.B., University of Illinois, 1912; A.M., Columbia, 1918 VEVIA BLAIR B.S., Columbia, 1915 ELIZABETH BRIGGS Graduate of Harvard Annex, 1887; A.M., Cornell, 1891 FRANK ELBERT BROOKS A.B., Cornell, 1890; graduate student, Bonn, Geneva, and Paris, 1896-99 MARIE KARCHER BROOKS French Student, University of Geneva and University of Paris, 1901-02 EMATTHEW BROWN LL.B., Syracuse University, 1918 HARRIET GARTON CARTWRIGHT Diploma, Des Moines Musical College, 1897 JENNIE MAE CLARK A.B., Wellesley College, 1899; A.M., Columbia, 1918 BERTHE MULLER COSTIKYAN BERTHE MULLER COSTIKYAN A.B., Swinth, 1899; A.M., Columbia, 1918 BERTHE MULLER COSTIKYAN A.B., Syracuse University, 193 BERTHE MULLER COSTIKYAN A.B., Smith, 1899; A.M., Columbia, 1916 SERTHE MULLER COSTIKYAN A.B., Smith, 1899; A.M., Columbia, 1916 SERTHE MULLER COSTIKYAN A.B., Smith, 1899; A.M., Columbia, 1915 SERTHE MULLER COSTIKYAN A.B., Smith, 1899; A.M., Columbia, 1916 MARY BRONSON GILLMORE Ph.B., University of Chicago, 1906; B.S., Columbia, 1906 MARGARET GARSIDE A.B., Wellesley, 1915 CHARLES DUDLEY GEROW A.B., Cornell, 1899; graduate student, Columbia, 1900-01, 1904-05 JAMES HEILMAN GROSS A.B., Pennsylvania College, 1913; A.M., Columbia, 1918 Mathematics A.B., Cornell, 1899; graduate student, Columbia, 1900-01, 1904-05 JAMES HEILMAN GROSS A.B., Cornell, 1899; graduate student, Columbia, 1918	Teachers in Horace Mann High School
GEORGIA FARRAND BACON B.S., Michigan, 1896 CHARLES MCCOV BAKER A.B., Dickinson, 1893; A.M., Harvard, 1905 HELEN BARTLETT BAKER A.B., Vassar, 1889 MARK B. BARRY A.B., Villanova College, 1915 HELEN D. BAUM Diploma, Savage School of Physical Education, 1917 PAUL E. BELTING A.B., University of Illinois, 1912; A.M., Columbia, 1918 VEVIA BLAIR B.S., Columbia, 1917 BELLE BOAS B.S., Columbia, 1917 BELLE BOAS B.S., Columbia, 1915 ELIZABETH BRIGGS Graduate of Harvard Annex, 1887; A.M., Cornell, 1891 FRANK ELBERT BROOKS Cornell, 1890; graduate student, Bonn, Geneva, and Paris, 1896–99 MARIE KARCHER BROOKS Student, University of Geneva and University of Paris, 1901–02 MATTHEW BROWN L.B., Syracuse University, 1918 HARRIET GARTON CARTWRIGHT Diploma, Des Moines Musical College, 1897 JENNIE MAE CLARK A.B., Wellesley College, 1899; A.M., Columbia, 1918 BERTHE MULLER COSTIKVAN Ecole superieure, Vevey, 1897–1901; student, Chicago, 1910–11; Columbia, 1913–1916 JOHN HARVEY COULTER Ph.B., Syracuse, 1910 JOHN HARVEY COULTER Ph.B., Syracuse, 1910 JOHN HARVEY COULTER Ph.B., University of Chicago, 1906; B.S., Columbia, 1916 STELLA S. DUNHAM A.B., Ohio Wesleyan University, 1893; A.M., Columbia, 1906 MARGARET GARSIDE A.B., Wellesley, 1915 CHARLES DUDLEY GEROW A.B., Cornell, 1899; graduate student, Columbia, 1906 MARGARET GARSIDE A.B., Wellesley, 1915 CHARLES DUDLEY GEROW A.B., Cornell, 1902 MARY BRONSON GILLMORE Ph.B., Cornell, 1899; graduate student, Columbia, 1900–01, 1904–05 PAMES HEILMAN GROSS Mathematics	Student, Providence, R. I., Training School, 1893-94; Pratt Institute, 1896-97;
CHARLES MCCOY BAKER	GEORGIA FARRAND BACON
Helen Bartlett Baker	CHARLES McCoy Baker Head of Department of Latin
MARK B. BARRY A.B., Villanova College, 1915 Helen D. Baum Diploma, Savage School of Physical Education, 1917 PAUL E. BELTING A.B., University of Illinois, 1912; A.M., Columbia, 1918 VEVIA BLAIR BELLE BOAS B.S., Columbia, 1917 BELLE BOAS B.S., Columbia, 1915 ELIZABETH BRIGGS Graduate of Harvard Annex, 1887; A.M., Cornell, 1891 FRANK ELBERT BROOKS A.B., Cornell, 1890; graduate student, Bonn, Geneva, and Paris, 1896–99 MARIE KARCHER BROOKS Terench Student, University of Geneva and University of Paris, 1901–02 MATTHEW BROWN LLB., Syracuse University, 1918 HARRIET GARTON CARTWRIGHT Diploma, Des Moines Musical College, 1897 JENNIE MAE CLARK A.B., Wellesley College, 1899; A.M., Columbia, 1918 BERTHE MULLER COSTIKYAN French École superieure, Vevey, 1897–1901; student, Chicago, 1910–11; Columbia, 1913–1916 JOHN HARVEY COULTER Ph.B., Syracuse, 1910 LAURA BISHOP CRANDON A.B., Smith, 1899; A.M., Columbia, 1915 BERNICE FRANCES DODGE Ph.B., University of Chicago, 1906; B.S., Columbia, 1906 MARGARET GARSIDE A.B., Wellesley, 1915 CHARLES DUDLEY GEROW A.B., Wellesley, 1915 CHARLES DUDLEY GEROW A.B., Cornell, 1899; graduate student, Columbia, 1900–01, 1904–05 Mathematics Ames Heilman Gross Mathematics Mathematics	HELEN BARTLETT BAKER
Helen D. Baum	MARK B. BARRY
PAUL E. BELTING A.B., University of Illinois, 1912; A.M., Columbia, 1918 VEVIA BLAIR B.S., Columbia, 1917 BELLE BOAS B.S., Columbia, 1915 ELIZABETH BRIGGS Graduate of Harvard Annex, 1887; A.M., Cornell, 1891 FRANK ELBERT BROOKS A.B., Cornell, 1890; graduate student, Bonn, Geneva, and Paris, 1896–99 MARIE KARCHER BROOKS French Student, University of Geneva and University of Paris, 1901–02 MATTHEW BROWN LL.B., Syracuse University, 1918 HARRIET GARTON CARTWRIGHT Diploma, Des Moines Musical College, 1897 JENNIE MAE CLARK A.B., Wellesley College, 1899; A.M., Columbia, 1918 BERTHE MULLER COSTIKYAN French École superieure, Vevey, 1897–1901; student, Chicago, 1910–11; Columbia, 1913–1916 JOHN HARVEY COULTER Ph.B., Syracuse, 1910 LAURA BISHOP CRANDON A.B., Smith, 1899; A.M., Columbia, 1915 BERNICE FRANCES DODGE Ph.B., University of Chicago, 1906; B.S., Columbia, 1916 STELLA S. DUNHAM A.B., Ohio Wesleyan University, 1893; A.M., Columbia, 1906 MARGARET GARSIDE A.B., Wellesley, 1915 CHARLES DUDLEY GEROW A.B., Cornell, 1912 MARY BRONSON GILLMORE Ph.B., Cornell, 1899; graduate student, Columbia, 1900–01, 1904–05 IAMES HEILMAN GROSS Mathematics Mathematics	HELEN D. BAUM Assistant in Physical Education
VEVIA BLAIR	PAUL E. BELTING Assistant in Athletics
BELLE BOAS Fine Arts B.S., Columbia, 1915 ELIZABETH BRIGGS History Graduate of Harvard Annex, 1887; A.M., Cornell, 1891 FRANK ELBERT BROOKS French A.B., Cornell, 1890; graduate student, Bonn, Geneva, and Paris, 1896–99 MARIE KARCHER BROOKS French Student, University of Geneva and University of Paris, 1901–02 MATTHEW BROWN Physical Education LL.B., Syracuse University, 1918 HARRIET GARTON CARTWRIGHT Music Diploma, Des Moines Musical College, 1897 JENNIE MAE CLARK Mathematics A.B., Wellesley College, 1899; A.M., Columbia, 1918 BERTHE MULLER COSTIKYAN French École superieure, Vevey, 1897–1901; student, Chicago, 1910–11; Columbia, 1913–1916 JOHN HARVEY COULTER FRANCES DODGE FRANCE FRANCES DODGE Household Arts Ph.B., Smith, 1899; A.M., Columbia, 1916 STELLA S. DUNHAM Mathematics A.B., Ohio Wesleyan University, 1893; A.M., Columbia, 1906 MARGARET GARSIDE Coach in Dramatics A.B., Wellesley, 1915 CHARLES DUDLEY GEROW History A.B., Cornell, 1912 MARY BRONSON GILLMORE Ph.B., Cornell, 1899; graduate student, Columbia, 1900-01, 1904-05 IAMES HELIMAN GROSS Mathematics	VEVIA BLAIR
ELIZABETH BRIGGS	BELLE BOAS
FRANK ELBERT BROOKS A.B., Cornell, 1890; graduate student, Bonn, Geneva, and Paris, 1896–99 MARIE KARCHER BROOKS Student, University of Geneva and University of Paris, 1901–02 MATTHEW BROWN Physical Education LL.B., Syracuse University, 1918 HARRIET GARTON CARTWRIGHT Diploma, Des Moines Musical College, 1897 JENNIE MAE CLARK A.B., Wellesley College, 1899; A.M., Columbia, 1918 BERTHE MULLER COSTIKYAN French École superieure, Vevey, 1897–1901; student, Chicago, 1910–11; Columbia, 1913–1916 JOHN HARVEY COULTER Ph.B., Syracuse, 1910 LAURA BISHOP CRANDON A.B., Smith, 1899; A.M., Columbia, 1915 BERNICE FRANCES DODGE Household Arts Ph.B., University of Chicago, 1906; B.S., Columbia, 1916 STELLA S. DUNHAM Mathematics A.B., Ohio Wesleyan University, 1893; A.M., Columbia, 1906 MARGARET GARSIDE A.B., Wellesley, 1915 CHARLES DUDLEY GEROW A.B., Cornell, 1912 MARY BRONSON GILLMORE Ph.B., Cornell, 1899; graduate student, Columbia, 1900-01, 1904-05 IAMES HELIMAN GROSS Mathematics	ELIZABETH BRIGGS
MARIE KARCHER BROOKS	D D D
MATTHEW BROWN LL.B., Syracuse University, 1918 HARRIET GARTON CARTWRIGHT Diploma, Des Moines Musical College, 1897 JENNIE MAE CLARK	Marie Karcher Brooks French
LL.B., Syracuse University, 1918 HARRIET GARTON CARTWRIGHT	
Diploma, Des Moines Musical College, 1897 JENNIE MAE CLARK	LL.B., Syracuse University, 1918
A.B., Wellesley College, 1899; A.M., Columbia, 1918 BERTHE MULLER COSTIKYAN	Diploma, Des Moines Musical College, 1897
École superieure, Vevey, 1897–1901; student, Chicago, 1910–11; Columbia, 1913–1916 JOHN HARVEY COULTER	A.B., Wellesley College, 1899; A.M., Columbia, 1918
Ph.B., Syracuse, 1910 LAURA BISHOP CRANDON A.B., Smith, 1899; A.M., Columbia, 1915 BERNICE FRANCES DODGE Ph.B., University of Chicago, 1906; B.S., Columbia, 1916 STELLA S. DUNHAM A.B., Ohio Wesleyan University, 1893; A.M., Columbia, 1906 MARGARET GARSIDE A.B., Wellesley, 1915 CHARLES DUDLEY GEROW A.B., Cornell, 1912 MARY BRONSON GILLMORE Ph.B., Cornell, 1899; graduate student, Columbia, 1900-01, 1904-05 IAMES HELIMAN GROSS Mathematics Mathematics	École superieure, Vevey, 1897-1901; student, Chicago, 1910-11; Columbia, 1913-
A.B., Smith, 1899; A.M., Columbia, 1915 BERNICE FRANCES DODGE	
BERNICE FRANCES DODGE	
STELLA S. DUNHAM	Bernice Frances Dodge
MARGARET GARSIDE	STELLA S. DUNHAM
CHARLES DUDLEY GEROW	MARGARET GARSIDE Coach in Dramatics
MARY BRONSON GILLMORE	CHARLES DUDLEY GEROW
IAMES HEILMAN GROSS	MARY BRONSON GILLMORE
	JAMES HEILMAN GROSS

ROY WINTHROP HATCH
NELL ZENIA HAWKINSON
FRANK HEDERICK
PAUL HEINZELMANN
GEORGE THOMAS HOLM
CAROLINE WOODBRIDGE HOTCHKISS
EDITH INKS
CLARA BARBARA KIRCHWEY
GEORGE ALBRIGHT LAND
LILLIE MARIA LAWRENCE Latin B.S., Columbia, 1905
ALTON IRVING LOCKHART
CONRAD TRAVIS LOGAN
MARION G. MACKINNON Assistant in Household Arts A.B., McGill University, Montreal, Canada, 1910
Janet Rowland McCastline Recorder in Physical Education A.B., Columbia, 1902; A.M., 1905
A. BERDENA McIntosh English and Latin A.B., Wellesley, 1908
HARRY WHEELER MARTIN
ALBERT AMÉDÉE MÉRAS
WILLIAM JOHN NAGLE Latin A.B., Harvard, 1908; A.M., Columbia, 1916
JOHN DUELE NEITZ
ROBERT F. PAYNE
WALDO C. PEEBLES
OLIVE EWING PLACE
NINA FRANCES RAYNOR Latin A.B., Vassar, 1905; A.M., 1906
MARIE LOUISE ROBERT
KENNETH ROGERS English and Music A.B., Syracuse University, 1917
MILTON MYERS SMITH
PHILIP M. SMITH

EDGAR S. STOWELL
FLORENCE STUART
HOWARD FRANK TAYLOR Latin A.B., Yale, 1902; A.M., University of Chicago, 1906
JOHN T. VAN SANT
CARLE O. WARREN
ETHEL WENK
ROLAND HUGH WILLIAMS Head of Department of Science B.S., Wesleyan, 1898; A.M., Columbia, 1904
LAVERGNE WOOD
Teachers in Horace Mann Elementary School
GERTRUDE ISABEL BIGELOW First and Second Grades Diploma, Wheelock Kindergarten Training Class; student, Massachusetts State Normal School, 1900; Teachers College, 1912–13
MABEL MCVEY MEADOWCROFT
AGNES BURKE
EVELYN BATCHELDER
MILDRED IONE BATCHELDER Second Grade Diploma, Springfield, Mass., Training School, 1889
ALICE ELIZABETH PHELPS
MARY JULIA DETRAZ
DAISY TAYLOR FREELAND
MARY EVELYN CARROLL
IDA ELIZABETH ROBBINS
ETHEL MAY ORR B.S., Columbia, 1917
RUTH BATCHELDER STACKPOLE Fourth and Fifth Grades Diploma, Farmington Normal School, 1908
MARGARET GERTRUDE CONDRY
SIEGRIED MAIA UPTON
MARIE HENNES
MARY FREDERIKA KIRCHWEY
MARY GERTRUDE PEABODY
TEXA LAURA MOORE

LUCY HESS WEISER Industrial Arts
Diploma, Teachers College, 1895
DeForest La Voy
MORRIS MEISTER
HELEN LATHAM
ELIZABETH R. MERRITT Fine Arts B.S., Columbia, 1918
CHARLES F. SMITH
VANESSA GLUCKSMANN
MARGARET ELMINA TUTTLE
IRMA H. COXLEY Assistant in Fine Arts Student, Teachers College, 1915-18
HENRIETTA M. LANGNER Assistant in Household Arts B.S., Columbia, 1918
ALTA E. THOMPSON
MARGARET HAMERIK HOLMES Primary Assistant B.S., Columbia, 1915; A.M., 1918
ANNE BENNETT BRIGGS Assistant, Open Air, Grades II and III Special diploma, Teachers College, 1908
MARY HELEN COYKENDALL Assistant in Open Air, Grade IV Diploma, Montclair State Normal School, 1911; student, Teachers College, 1916
Teachers in Horace Mann Kindergarten
CHARLOTTE GANO GARRISON
B.S., Columbia, 1909
ETHEL MARIA ROBINSON
MARY EVERETT RANKIN
BLANCHE LOUISE BIRCH
HELENE KNEIP Assistant in Kindergarten B.S., Columbia, 1915

IV. SPEYER SCHOOL

(Conducted in cooperation with the Board of Education of New York City)

JOSEPH K. VAN DENBURG, Ph.D. . . . Principal of Public School 43, Manhattan THOMAS HENRY BRIGGS, Ph.D. . . . Educational Adviser representing Teachers College LORON M. BURDICK, MARGUERITE BURNS, GEORGE L. BYRNE, AUSTIN G. CLARK, KATHLEEN DENVER, LORETTA C. EARLY, JOSEPHINE FORAN, ELSA GREENBERG, FRANCES LANTRY, LOUIS LIPPMAN, BERTHA LUCHS, VIVIAN MCCAFFERY, ETHEL M. MAHONEY, MARY MOONEY, HELEN O'BRIEN, HARRIET E. PORRITT, ABRAHAM ROSENTHAL, ETHEL S.

SCHWARZ, MARGUERITE STECKEL.

V. THE LINCOLN SCHOOL

Administrative Board

JAMES E. RUSSELL, LL.D.
Dean of Teachers College, Chairman
Otis W. Caldwell, Ph.D.
Director of The Lincoln School

ABRAHAM FLEXNER
CHARLES P. HOWLAND
WICKLIFFE ROSE
MRS. WILLARD STRAIGHT

Mrs. Joseph R. Swan Arthur Turnbull George E. Vincent Felix M. Warburg

Teachers in The Lincoln School

ETHELWYN C. BRADISH Fine Arts Diploma, Teachers College, 1911
CHESTER A. BUCKNER Education Measurements A.B., University of Iowa, 1909; A.M., 1911; Ph.D., Columbia, 1918
NELL C. CURTIS
ANNIE T. EATON
ALANSON H. EDGERTON Industrial Arts B.S., Columbia, 1913; A.M., 1917
MARGARET FAULKENHAUSEN Secretary
CHARLES W. FINLEY
JOHN GUY FOWLKES
Anna J. Gannett
EARL R. GLENN
ELIZABETH GMINDER
GAIL HARRISON
LOUIS A. HERR
MARGARET HOLZ German and Spanish A.M., Columbia, 1915
JEAN HOSFORD
ALBERT H. HUNTINGTON
JOSEPH LYMAN KINGSBURY
STERLING ANDRUS LEONARD English A.B., Michigan, 1908; A.M., 1909
LOUIE LESSLIE
HOWARD H. MASON School Physician A.B., Brown, 1900; M.D., Columbia, 1904
OLIVE MOORE

OTHON QUINCHE
SUZANNE ROTH
RALEIGH SCHORLING
LIDA LEE TALL Supervising Principal, Elementary School B.S., Columbia, 1914
F. F. Von Court
GERTRUDE WIGHT
EFFIE MAY WILLIAMSON Fourth Grade B.S., Columbia, 1917
FLORENCE E. WINCHELL
LYDIA A. WOLIUNG
LULA E. WRIGHT Assistant in Elementary School B.S., Columbia, 1919

COLUMBIA UNIVERSITY

General Statement

Columbia University was founded in 1754 as Kings College by royal grant of George II, King of England, "for the Instruction of youth in the Learned Languages, and the Liberal Arts and Sciences." The Revolutionary War interrupted its active work; but in 1784 it was reopened as Columbia College. In 1912, the corporate title was changed to Columbia

University in the City of New York.

The University at the present time consists of Columbia College, the undergraduate college of liberal arts, which offers a program of studies leading to the degree of Bachelor of Arts; the School of Law, with courses leading to the degrees of Bachelor and Master of Laws; the College of Physicians and Surgeons, with courses leading to the degrees of Bachelor of Science and Doctor of Medicine; the Schools of Mines, Engineering, and Chemistry, with courses leading to the several engineering degrees and the degrees of Chemist and Master of Science; the School of Architecture, with courses leading to the degrees of Bachelor of Architecture and Master of Science; the School of Journalism, with courses leading to the degrees of Bachelor of Literature and Master of Science; the School of Business, with courses leading to the degrees of Bachelor and Master of Science; the School of Dentistry, with courses leading to the degrees of Bachelor of Science and Doctor of Dental Surgery; the non-professional graduate Faculties of Political Science, Philosophy, and Pure Science, with courses leading to the degrees of Master of Arts and Doctor of Philosophy. In addition to these Schools and Faculties, the University includes the independent corporations of Barnard College, the undergraduate college for women, with courses leading to the degree of Bachelor of Arts; Teachers College, including the Faculties of Education and Practical Arts, with courses leading to the degrees of Bachelor of Science, Master of Arts, and Master of Science; and the New York College of Pharmacy, with courses leading to the degrees of Pharmaceutical Chemist, Bachelor of Science, and Doctor of Pharmacy.

The University maintains three Sessions during the year: The Winter Session, beginning the last Wednesday of September and ending the first Tuesday of February; the Spring Session, beginning the first Wednesday of February and ending the second Wednesday of June; and the Summer Session of six weeks' duration, beginning the Monday following July 4.

For dates for 1919-1920, see Academic Calendar, p. 133.

Admission

A student may enter Columbia University as:

- 1. A matriculated student accepted and registered by the proper authorities as having fulfilled the preliminary qualifications for candidacy for a degree, or diploma. See p. 24 for the requirements for admission to the School of Education as a matriculated student.
- 2. A non-matriculated student, permitted to attend such courses of instruction as he may be qualified to take, but not regarded as a candidate for a degree, or diploma. See p. 32 for conditions of admission as a non-matriculated student.

TEACHERS COLLEGE

General Statement

Teachers College, founded in 1888, and chartered by the Regents of the University of the State of New York in 1889, became in 1898 part of the educational system of Columbia University. By an agreement dated June 8, 1915, the President of the University became ex officio the executive head of Teachers College with the powers and duties of President as defined by the statutes of Teachers College. The Faculties of Education and of Practical Arts in Teachers College are recognized as Faculties of the University under the administrative charge of the Dean of Teachers College. The College is represented in the University Council by its Dean and two elected members of each Faculty. The College maintains, however, its separate corporate organization, its Board of Trustees continuing to assume entire responsibility for its maintenance.

The Faculty of Education offers to advanced students of both sexes in the School of Education instruction in the history and philosophy of education, in educational psychology and sociology, and in the theory and practice of educational administration, supervision, and class-teaching. Its curricula lead to the degrees of Master of Arts and Doctor of Philosophy, conferred by Columbia University, and to Teachers College diplomas for instructors in education in colleges and universities, for supervisors, principals, and superintendents of schools of all grades, for heads of academic or education departments in normal and teachers' training schools, and for teachers in secondary and elementary schools.

The Faculty of Practical Arts offers to both men and women in the School of Practical Arts instruction both in education and in technology relating directly to the practical arts. Its curricula lead to the degrees of Bachelor of Science and Master of Science, conferred by Columbia University, and to the Teachers College diplomas for teachers and supervisors in various fields of practical arts. The degree of Bachelor of Science admits to graduate work for the degree of Master of Science, Master of Arts, or Doctor of Philosophy. In co-operation with the Faculty of Education, the Faculty of Practical Arts also conducts graduate work in the educational aspects of practical arts leading to the degree of Master of Arts.

For the degree of Bachelor of Science and the Teachers College diplomas, the School of Practical Arts offers programs of study four years in length, equivalent in standards of admission and graduation to those in the leading American colleges. All programs include during the first two years general cultural subjects as a foundation for the professional training of the last two years in science and the arts as applied in industrial arts, household arts, dietetics, institutional management, public health, nursing, fine arts, the art industries, music and speech, and physical training. For further information see the Announcement of the School of Practical Arts, which may be had from the Secretary of Teachers College.

THE SCHOOL OF EDUCATION

Admission Requirements

The policy of Teachers College is to adapt its work to the needs of students in training for positions of leadership in the educational field. It follows, therefore, that the requirements for admission should emphasize maturity, experience in teaching, and academic scholarship appropriate to the subject or department in which the student intends to specialize. The actual requirements in these several lines vary according to the provision

made in state and municipal institutions for the training of teachers and to the needs of professional leadership in the administration of schools and school systems. Some positions emphasize practical experience in teaching and school management, while others lay stress upon academic training. It is the aim of Teachers College to suit both the requirements of admission and of graduation to the actual conditions which prevail in American education.

Graduates of an approved college or scientific school, holding a baccalaureate degree in arts, letters, philosophy, or science, or an engineering degree, are regularly admitted to Teachers College as candidates for the degrees of Master of Arts, Master of Science, and Doctor of Philosophy and

the Teachers College diplomas.

Graduates of approved normal or training schools who have had at least two years' successful experience in teaching may be admitted to the School of Education as unclassified students. They may elect any courses which they are qualified to pursue in the Schools of Education and Practical Arts or in any other department of the University. When such students have completed the equivalent of an approved Bachelor's degree, they may petition the Faculty to be granted the degree of Bachelor of Science, provided their scholarship has been of high grade and their period of residence in Teachers College at least one academic year. After receiving the Bachelor's degree, the degree of Master of Arts may be earned by an additional year's study. Students who on entrance lack less than a year of an approved Bachelor's degree, may matriculate for the Master's degree after completing the amount of their deficiency.

An undergraduate who, at the beginning of any half-year, is within twelve points of the Bachelor's degree, may be permitted, with the written approval of the dean or director in charge of the student's work, to carry a program containing undergraduate and graduate courses. All such courses must be registered for in Teachers College. If the student afterwards matriculates as a candidate for a higher degree, the graduate courses previously taken by him for graduate credit under this provision will be entered in his curriculum as already completed. A student who thus combines graduate and undergraduate work is not permitted to carry a program exceeding 16 points per half-year.

Candidates for admission to any graduate curriculum must apply to the Secretary of Teachers College for a blank form of application, to be returned with records of previous work for the consideration of the Committee on Admissions, which will inform the sender with regard to its acceptance.

GRADUATE CURRICULA

Requirements for the Higher Degrees

UNIVERSITY REGULATIONS

For a full statement of all the formal University regulations concerning residence, requirements, examinations, etc., for the higher degrees, see the Circular of Instruction for Graduate Students which may be had from the Secretary of Teachers College.

RESIDENCE

Candidates for the degrees of Master of Arts and Doctor of Philosophy must pursue their studies in residence for a minimum period of one and two years, respectively. Attendance distributed over a period of not less than one academic year (a Winter and a Spring Session), upon courses of graduate rank aggregating 30 tuition points, constitutes one year of resi-

dence for the higher degrees. The satisfactory completion of work in four Summer Sessions, or in two Summer Sessions together with a Winter or a Spring Session, will be accepted in full satisfaction of the requirements for residence for the degree of Master of Arts. Candidacy for the degree of Master of Arts may extend throughout a period of five years.

THE DEGREES OF MASTER OF ARTS AND MASTER OF SCIENCE

For Candidates Specializing in Teachers College

PROGRAM OF STUDIES AND ESSAY

The degree of Master of Arts represents the work of one academic year of about forty hours a week in class attendance, preparation, study, or laboratory. The degree will be conferred after the following requirements have been satisfied:

- I. The candidate shall have registered for and attended courses aggregating not less than 30 tuition points distributed over a period of not less than one academic year or its equivalent. Four Summer Sessions, or two Summer Sessions together with one Winter or Spring Session, constitute the equivalent of one academic year.
- 2. The candidate shall have completed in Teachers College courses totaling at least 16 tuition points, 3 of which shall be fundamental professional or advanced courses of 3 or more points each, numbered above 300 in the School of Education or above 200 in the School of Practical Arts. The remaining courses necessary to complete the tuition requirement of 30 points may be taken either in Teachers College or in other departments of the University.
- 3. In addition to the requirements mentioned in (1) and (2) above, the candidate is required to prepare an essay or a written report on field investigation, practice teaching (for inexperienced teachers), or some other form of practical work demonstrating his ability to select, organize, and present the results of professional investigation in the field of major interest. The choice of such essay or report must be approved in advance by the Director of the School of Education or the Director of the School of Practical Arts. Upon completion the essay or report must be approved by the instructor in charge of the student's subject of major interest. After such approval and acceptance, the candidate must file two copies of the essay or report with the Registrar not later than the dates fixed in the Academic Calendar.

There may be substituted for the required essay or report, with the approval of the Director of the School of Education, a written digest of six unit courses or an extra course in Teachers College in addition to the courses covered by the 30 tuition points. No tuition fees are charged for the essay or report or the six unit courses, but the full tuition fee is charged for a course substituted for the essay.

Every candidate before entering upon his work for the degree of Master of Arts should have completed courses in Educational Psychology and in History and Principles of Education equivalent to Education A and Education B, as offered in the undergraduate departments of this University. If these courses have not been completed previously at least one of the courses required in Teachers College must be a general introductory course in education. A student specializing in the technical phases of practical arts may waive this requirement in general educational subjects by becoming a candidate for the degree of Master of Science instead of Master of Arts.

Apart from this requirement, the curriculum for a Master's degree is arranged in each case by the student's adviser and is approved by the Director of the School of Education.* The whole curriculum may not fall entirely within one department of Teachers College; it must include at least two courses in some other department of Teachers College or in some other part of the University. In case of deficient preparation, the department of the student's major interest may prescribe prerequisite undergraduate courses.

THE DEGREE OF DOCTOR OF PHILOSOPHY

For Candidates Specializing in Education

ADMINISTRATION

The University maintains under the jurisdiction of the Faculty of Philosophy a department of Educational Research composed of designated professors from the Faculty of Education in Teachers College. department is charged with the work of instruction and research leading to the degree of Doctor of Philosophy for all candidates for that degree electing to specialize in Education.

MATRICULATION EXAMINATION

On recommendation of the Department of Educational Research a student may matriculate as a candidate for the degree of Doctor of Philosophy in the Department of Educational Research under the Faculty of Philosophy, provided he has satisfied the following requirements:

I. He must hold a Bachelor's degree fully recognized by this University, or its equivalent.

- 2. He must have pursued graduate studies in Education in residence in Teachers College, or in some other institution approved by it, for the equivalent of at least one academic year.
- 3. He must show that his graduate study mentioned in (2) has included credit for an advanced course in each of the following groups:

A. Educational psychology

B. History of education C. Philosophy of education, or Educational sociology

- D. Elementary education, or Secondary education, or Educational administration, or Normal school education, or Vocational education, or Rural education, or Religious education, or Practical Arts education.
- 4. He must pass a satisfactory written examination given by the Faculty of Education in educational psychology and in one subject each, selected from any two of the Groups B, C, and D mentioned in

^{*}Candidates expecting to satisfy the requirements of the Department of Education of the State of New York for a College Graduate Provisional License should recall that the requirements for this license include 90 hours (equal to 6 undergraduate points) in the History of Education, 90 hours in Educational Psychology, and 60 hours in Methods of Teaching to include two different subjects. Students who have not satisfied these requirements in their undergraduate work should make up their deficiencies in graduate courses. Students planning a program of study to meet these requirements should have their programs approved in advance by the Director of the School of Education.

(3). The examination in the subjects mentioned in (3) will relate to the work covered in a fundamental course in each. This examination in the three subjects must be taken at one time and is given only at Teachers College. In the rating of students for matriculation half of the credit will be assigned to class and field work, one-fourth to examination in the major subject, one-fourth to the examinations in the two remaining subjects.

Candidates for the preliminary examination should apply on or before May I or August I for an examination to be held soon after these dates. For the May examination see dates in the academic

calendar (p. 134).

- 5. He must show that he is prepared to undertake educational research by demonstrating his ability to use the necessary scientific instruments of investigation and by making a preliminary study. For practical field research these are the method of statistical inquiry; for documentary study they are the modern languages, preferably French and German. For certain studies both kinds are necessary. The choice and mastery of such instruments and the product of the preliminary investigation must be approved by the departments concerned and by the Department of Educational Research.
- 6. Students majoring in the special subject-matter departments of mathematics, history, English, etc., may substitute for the requirements stated above in (3) and (4) professional or subject-matter courses either in Teachers College or in other departments of the University, subject to the approval of the department of major interest and of the Director of the School of Education, provided that at least one education course in Groups A, B, C, or D shall be taken in each of two years of the student's residence. Such students must pass a satisfactory written examination covering the work above prescribed given by a committee appointed by the Director of the School of Education.

The combined examinations and tests mentioned above in (4) and (5), or in (5) and (6), are known as the *matriculation examinations* for the Doctor's degree*. Until a graduate student has passed these matriculation examinations, he is known as an unclassified graduate student. After passing the examinations he is an accepted candidate for the Doctor's degree.

PROGRAM OF STUDIES

The candidate must pursue graduate studies and research for at least two academic years, one of which must be in this University. The graduate studies must include courses in Education representing at least 30 tuition points, four of which courses must be practica or research courses; a seminar in Education for one year without credit in connection with the work on the dissertation; and other courses, representing at least 30 more

^{*}A graduate student entering Teachers College immediately after taking his Bachelor's degree can usually so arrange his program of studies that he is prepared to take the matriculation examinations for the Doctor's degree at the end of the first year of graduate study. This first year of graduate study would also lead to the degree of Master of Arts. Commencing with his second year of graduate study, the student would be known as a candidate for the Doctor's degree, if he has by that time passed the matriculation examinations. As student who enters Teachers College after a year of graduate study elsewhere may attempt the matriculation examinations for the doctorate on entrance, or may take them after a year of graduate study in Teachers College. The latter course is preferable, and in no way delays the student's progress toward the Doctor's degree, as no fixed interval of time must elapse between the passing of the matriculation examinations and the taking of the degree. It is possible, therefore, for the student who enters Teachers College after a year of graduate study elsewhere to make as rapid progress toward the Doctor's degree as one who comes to Teachers College directly after receiving his Bachelor's degree.

tuition points, in education or in such other subjects as may be approved by the Department of Educational Research.* Graduate study prior to the candidate's matriculation for the Doctor's degree may be accepted in partial fulfillment of the above requirement.

DISSERTATION

The candidate must prepare a dissertation approved by the Department of Educational Research and embodying the results of his researches. This dissertation must be printed either prior or subsequent to the final oral examination, as the department may require. The topic must be approved in writing by the department in charge of the candidate's studies before December I of the academic year in which the degree is desired, and the dissertation must be submitted not later than April I of the same year.

FINAL EXAMINATION

Candidates who have fulfilled all of the above requirements will, on recommendation of the Department of Educational Research, be admitted to final oral examination, which will be conducted by a committee appointed by the Dean of the Faculty of Philosophy. This final examination is quite distinct from the matriculation examinations mentioned above.

OTHER REGULATIONS

For other formal University regulations concerning the Doctor's degree, see the Circular of Instruction for Graduate Students, which may be had from the Secretary of the University, or the Secretary of Teachers College.

TEACHERS COLLEGE DIPLOMAS

Teachers College provides in the School of Education both for research in education and for professional training. The degrees granted indicate primarily the quantity of work done; the diplomas certify to its professional aim. Students may pursue curricula leading to a higher degree without regard to professional ends, or they may elect to specialize in administration, supervision, and the theory and practice of teaching with a view to professional service. In either case the requirements for the degrees may be met, but diplomas will be granted only to those who, besides qualifying for a degree, give promise of superior professional ability as evidenced by their personality, character, experience, and technical training.

Each student is required at matriculation to state his major interest and in the election of courses to secure the approval of his adviser. There is no prescribed curriculum, or fixed combination of courses, required for any diploma. The previous training of the student, his experience in teaching, and his future needs govern the adviser in his recommendations. It is expected, however, that the characteristic courses offered in any department, particularly courses on the theory and practice of teaching, supervision, and administration, will be elected by a candidate for a diploma as part of his curriculum. The guiding rule is that the student should first determine the career which he wishes to pursue and then seek the assistance of a faculty adviser in making up his curriculum.

A student without experience in teaching who wishes to earn a diploma as a teacher of a secondary academic subject (biology, English, French,

^{*} It should be understood that the above requirement in courses is in every sense a minimum requirement and that in general no candidate is able to satisfy his department by taking only the minimum work. Actual experience indicates that the usual period of study necessary to obtain the Doctor's degree, with Education as a specialty, covers the equivalent of three academic years beyond the Bachelor's degree.

geography, German, history, Latin, mathematics, or physical science) is expected to include in his program two courses in the methods of teaching his chosen subject, at least one unit course (which may be taken without fee) in the teaching of a secondary academic subject other than his field of specialization (see p. 38) and the two courses in practical work in teaching known as Education 281 (or 282) and Education 283 (or 284), described on page 68, the rest of the program to be made up with the approval of the adviser.

The award of the Teachers College diploma depends in each individual case upon the Faculty's estimate of the candidate's professional fitness for the office sought, such as Teacher of Latin in High Schools, Primary Supervisor, Superintendent of Schools, etc. The responsibility for demonstrating fitness rests upon the candidate. To this end the curriculum should be selected with care, and advantage should be taken of the facilities offered by the College and its Schools and by practical work in the schools of New York City and its vicinity. For reasons of weight, the Faculty may decide to withhold a diploma for some time after the degree has been conferred until the candidate has had the opportunity to show his ability in school work. A college graduate without experience in teaching may secure a diploma as High School Teacher in one year, but in other fields either experience in teaching, or a longer period of study, or both, are necessary.

The Teachers College diploma may be granted in accordance with the above conditions to an applicant holding a recognized degree who is registered in any part of this University and who has completed the requirements for a degree in this University provided he has completed in Teachers College courses totaling at least 16 tuition points, 3 of which shall be fundamental professional or advanced courses of 3 or more points each, numbered above 300 in the School of Education, together with such prerequisite or correlative courses as may be specified by the adviser for the diploma for which he is an applicant.

Specially qualified seniors in Barnard or Columbia College, who have completed Education A and who are taking Education B, may, with the approval of the dean of the college concerned, elect courses in Teachers College with a view to securing a Teachers College diploma; such students may satisfy the diploma requirements by taking a minimum of two courses in the methods of teaching their special subject together with the two courses known as Education 281 and Education 283 (or 284).

Teachers College diplomas are generally accepted in the United States and foreign countries as satisfying the legal requirements for teachers' certificates. Students who know of special requirements which they must meet in a particular state should take such matters into account in making up their curricula.* The Faculty can certify only to what is done under its guidance. Where more information is required than is conveyed in the diploma, the candidate may secure a supplementary statement from the Registrar of the College.

Any field of professional service in which the College gives instruction may, with the approval of the Committee on Instruction, be selected by a qualified candidate for a diploma. The list of subjects for which advisers have been officially designated is given on pages 31-32; others may be added as need arises.

^{*}Candidates expecting to satisfy the requirements of the Department of Education of the State of New York for a College Graduate Provisional License should recall that the requirements for this license include 90 hours (equal to 6 undergraduate points) in the History of Education, 90 hours in Educational Psychology, and 60 hours in Methods of Teaching to include two different subjects. Students who have not satisfied these requirements in their undergraduate work should make up their deficiencies in graduate courses. Students planning a program of study to meet these requirements should have their programs approved in advance by the Director of the School of Education.

Diploma Titles and Official Advisers

Instructor in Education—Professors Monroe, Thorndike, Snedden, and Kilpatrick.

Teacher of Education—Professors Monroe, Thorndike, Snedden, and Kilpatrick.

Superintendent of Schools—Professors STRAYER and MCMURRY.

Principal of High Schools—Professors Briggs, Johnson, and Stevens. Inspector of High Schools—Professors Briggs, Johnson, and Stevens.

Critic Teacher in Normal Schools—Professors Bagley, McMurry, and Bonser.

Principal of Normal Schools—Professors Bagley, McMurry, and Strayer.

Supervisor in Normal Schools—Professors Bagley, McMurry, and Bonser.

Superintendent in Training Schools—Professors Bagley, McMurry, and Bonser.

Principal of Elementary Schools—Professors McMurry, Strayer, and Bonser.

Supervisor of Elementary Schools—Professors McMurry and Bonser. Principal of Primary Schools—Professors McMurry, Strayer, and Bonser.

Supervisor of Primary Schools—Professors McMurry and Bonser.

Supervisor of Lower Primary Schools (Kindergarten-Primary)—Miss Moore and Professor Hill.

Teacher in Kindergartens—Professor Hill. Supervisor of Kindergartens—Professor Hill.

Adviser to Women and Girls—Professors Monroe and Stevens.

Psychologist—Professor Thorndike.

Assistant Psychologist—Professor Thorndike.

Supervisor of Religious Education—Professors COE and TALLMAN.

Social-Religious Worker—Professor TALLMAN.

Teacher or Supervisor in Foreign Schools—Professor Monroe and Dr. Sailer.

Teacher in Special Classes—Professor L. S. Hollingworth. Supervisor of Special Classes—Professor L. S. Hollingworth.

Supervisor of Rural Schools—Dr. Wilson, Professor Bonser, and Miss Dunn.

Teacher of Rural Education in Normal Schools—Professors BAGLEY and CARNEY, and Dr. WILSON.

Director of Rural Education in Normal Schools—Professors BAGLEY and CARNEY, and Dr. Wilson.

Teacher of Biology—Professor BIGELOW. Teacher of English—Professor BAKER. Supervisor of English—Professor BAKER. Teacher of Fine Arts—Professor Dow.

Supervisor of Fine Arts—Professor Dow. Teacher of French—Professor MÉRAS.

Teacher of Geography—Professor McFarlane. Supervisor of Geography—Professor McFarlane. Teacher of German—Professor Bagster-Collins.

Supervisor of German—Professor Bagster-Collins. Teacher of History—Professor Gambrill.

Supervisor of History—Professor Gambrill.
Teacher of Household Arts—Professor Cooley.
Supervisor of Household Arts—Professor Cooley.

Teacher of Industrial Arts—Professors Bonser, Snedden, and Dean. Supervisor of Industrial Arts—Professors Bonser, Snedden, and Dean.

Director of Industrial Arts-Professors Bonser, Snedden, and Dean. Director of Industrial Arts and Vocational Education—Professors DEAN, SNEDDEN, and BONSER.

Teacher of Latin-Professor LODGE. Supervisor of Latin—Professor Lodge.
Teacher of Mathematics—Professor SMITH.

Supervisor of Mathematics—Professor SMITH.
Teacher of School Music—Professor FARNSWORTH.

Supervisor of School Music—Professor Farnsworth.

Teacher of Hygiene and Physical Education—Professor Wood. Supervisor of Hygiene and Physical Education—Professor Wood.

Supervisor of Play and Playgrounds—Professor Wood.

Teacher of Scoutcraft—Professor Fretwell.

Teacher of Physical Science—Professor WOODHULL. Supervisor of Physical Science—Professor WOODHULL.

Instructor and Supervisor in Schools of Nursing—Professor NUTTING.
Public Health Nurse—Professor NUTTING.

Public School Nurse-Professor NUTTING.

Superintendent of Hospitals—Professor NUTTING.

Superintendent of Nursing and Principal of Training Schools-Professor

Supervisor of Public Health Nursing—Professor NUTTING. Other titles may be approved by the Committee on Instruction.

NON-MATRICULATED STUDENTS

Teachers who are qualified to pursue special courses in any department of the School of Education may be admitted as non-matriculated students. Such students are expected to conform to the same standards of attendance and scholarship as are fixed for matriculated students. Applicants will be required to submit credentials in advance to the Committee on Admissions of Teachers College, and, if necessary, to pass such examinations as may be prescribed by the department which they desire to enter. A non-matriculated student in good standing will be given an official statement of all work satisfactorily completed.

PART-TIME STUDENTS

Teachers in or near New York City, who desire to pursue regular work at Teachers College, but are able to command only a portion of their time for such work, may matriculate as candidates for degrees and diplomas, with all the privileges of regular students. Such students are required to comply with all of the regulations for registration, attendance, proficiency, and examinations established for students in full residence (see pages 33-34). The fees for such partial work are stated on page 35.

SUMMER SESSION

The twentieth Summer Session of Columbia University, including many courses by regular instructors in Teachers College, will open on Monday, July 7, 1919, and close on Friday, August 15. Teachers College now makes the Summer Session an integral part of its academic year. Most professors take part in the work of summer instruction-some of them every year, some in alternate years, nearly all at some time within a four-year period. Teachers College courses that are most in demand are given every year; many other important courses in alternate years. The courses offered are planned to meet the needs of teachers in elementary, secondary, and normal schools, and in colleges. Students who enroll at the Summer Session do not necessarily matriculate, *i. e.*, become candidates for degrees or diplomas. Students who become regular candidates for a Teachers College diploma and degree will receive credit toward the degree and diploma for courses taken in the Summer Session, according to the regulations stated in connection with the announcement of each course. Application for matriculation and credit must be made to the Secretary of Teachers College. The Master's degree may be earned entirely through Summer Session work within five years from matriculation. At least one year of the work for the Bachelor's degree and for the Doctor's degree must, however, be done during the regular academic year. For undergraduates 24 points represent a minimum year's residence during the regular academic year.

The Announcement of the Summer Session, containing detailed statements of the several courses, information concerning these and concerning the arrangements which students may make for board and lodging, will be sent on application to the Secretary of Columbia University, or to the

Secretary of Teachers College.

GENERAL REGULATIONS

Registration

I. Registration extends through the week before the opening of the Winter Session (first half-year) in September and during three days preceding the opening of the Spring Session (second half-year) in February. Graduate students are allowed additional days. Exact dates are given in the Academic Calendar at the end of this Announcement. Registration and enrollment at a later date are permitted only to students who, showing good cause for the delay, obtain the consent of the Committee on Instruction and who pay a late registration fee of five dollars. Students thus permitted to register at a late date are required to pay full tuition for the session in which they register, and are held accountable for the absences thus incurred. Students who register for any course after the fourth Saturday of either the Winter or the Spring Session, dating from the Wednesday upon which the Session begins, are allowed only half credit for the Session. No credit is allowed to those entering a course later than the middle of the Winter or Spring Session.

New students are urged to forward their applications early, and those who would avoid long delay at registration time should arrange all matters of admission in advance by mail.

2. At registration, each student must file with the Registrar a list of all the studies he desires to pursue for the session, signed by his adviser. No credit is allowed for any course not approved and registered for in this manner. To complete his registration the student shall pay the required fees to the Bursar. Any necessary changes in such registered lists must be similarly approved and filed with the Registrar on blanks provided for the purpose.

3. Each person whose registration has been completed will be considered a student of the University during the period for which such registration is held valid. No student registered in any school or college of the University shall at the same time be registered in any other school or college, either of Columbia University or of any other institution without the consent of the appropriate Dean or Director.

4. Courses of instruction open in other parts of the University to qualified students of the School of Education are indicated in connection with the description of the School of Education Courses of Instruction, on pages 42 to 90. Students should, however, always consult the official Announcement of the Faculty, College, or Division in which work is desired, not

depending upon quotations from them in other Announcements. Columbia College is open only to men; Barnard College only to women; Teachers College courses and a large number of graduate courses in other parts of the University are open to women on the same terms as to men.

- 5. Lists of courses in the School of Education which are open as electives to students of Columbia College and of Barnard College are approved by the Faculties concerned and published annually in the Announcements of those colleges.
- 6. No student is permitted to change his registration from one Faculty or School of the University to another without the written consent of the Deans and Directors concerned.
- 7. The presence of all students is required at the College on the day immediately following the close of all vacations and recesses. The Academic Calendar for the year 1919–20 may be found on the last pages.
- 8. Students who are deficient in their attendance, or who perform their class duties unsatisfactorily, may be required at any time to make such changes in program or plan of work as the Committee on Instruction may deem necessary.
- 9. Students who find that stated academic exercises are fixed for days set apart for religious observance by the church to which they belong, and who are prevented by conscientious scruples from performing their University duties on those days, should apply in advance to the Committee on Instruction for relief. When, however, two opportunities for taking any given examination are offered, such students are expected to present themselves on the day which is not set apart as a holy day.

Graduation

10. Diplomas are issued only at Commencement, and in February and October, upon the completion of the requirements for a degree.

Health Regulation

11. All students taking eight or more hours per week are required at the beginning of each year to pass a health examination satisfactory to the Department of Physical Education. Students may at any time be required to modify or discontinue their work for physical reasons. The College Physician and the assistant physicians, one of whom is a woman, give professional advice free of charge to students who consult them in their offices in the Thompson Building.

Academic Discipline

12. The admission, continuance upon the rolls, and graduation of any student is subject to the full disciplinary power of the University authorities, as prescribed by the statutes of the University.

Withdrawal

13. An honorable discharge will always be granted to any student in good academic standing, and not subject to discipline, who may desire to withdraw from the University; but no student under the age of twenty-one years shall be entitled to a discharge without the assent of his parent or guardian furnished in writing to the proper dean or director. In cases of withdrawal for any reason, students should notify the Registrar in writing without delay. No application for a return of fees can be considered unless such application is made at the time of withdrawal. The College reserves the right to retain fees of students withdrawing from any classes with limited registration. The Dean or Director of the school or faculty concerned, may, for reasons of weight, grant a leave of absence to a student in good standing.

FEES

Each student in the University will be called upon to pay three necessary fees. He will pay each year a University fee, a tuition fee, and, in the year

of graduation, a graduation examination fee.

The University Statutes provide that tuition fees and the University fee are payable semi-annually in advance. Registration will not be complete until such fees are paid. No reduction in fees is made for late registration. Payment of fees after the last day of registration imposes automatically the statutory charge of \$5.00 for this privilege. Under the regulations, the privileges of the University are not available to any student until he has completed his registration. For registration dates, consult calendar, pages 133-

Fees for degrees, graduation, and special examinations are payable at

the time of filing application for these.

The fees to be paid by students are subject to change at any time at the discretion of the Trustees.

The point value of each course upon which tuition fees are based is

given on pp. 42–100 in connection with the announcement	י יוב.	O1	LIII	c c	ourse.
(a) University Fee:					
For all students for each Session or any part thereof .					\$5.00
(b) Tuition Fee:					
For all students per point, except in cases where a spe	cia	1 f	ee	is	
fixed for a particular course					6.00
(c) For a Degree or Diploma, or for an examination therefor:					
For the Teachers College Diploma					5.00
For the degree of Bachelor of Science					15.00
For the degree of Master of Arts, or Master of Science					
For the degree of Doctor of Philosophy					35.00
(d) For Privileges:					
(I) Late registration or application (see p. 33)					5.00
(2) Deficiency and special examinations					5.00
(3) Maximum fee for examinations in a single series .					25.00
(a) Dehates					

(1) The University Fee and the Degree Fee are not subject to rebate.

(2) After the last day of the period provided for change of programs (second Saturday of the Winter or Spring Session for undergraduates, fourth Saturday for graduates), no tuition fees will be returned for any course which the student may for any reason discontinue. Exception to this rule may be made only in cases of total withdrawal from the University, when a pro rata return of fees may be authorized by the Controller. When a rebate is allowed for the discontinuance of courses and withdrawal from the University, such rebate will be reckoned from the day upon which the Registrar receives notice from the student.

Note. All laboratory, gymnasium, shop, studio, and other special fees are now covered by the University and tuition fees. A deposit for the use of lockers, keys, apparatus, material, and the like is required, however.

PRACTICAL WORK IN THE SCHOOLS OF NEW YORK CITY AND VICINITY

Arrangements have recently been made by which students who are specializing in practical administration and methods of teaching may have the privilege of doing practical work in the schools of New York City and its suburbs. This work is of several types, depending upon the experience and needs of the individual.

Teachers and supervisors of experience, interested in educational administration, have many opportunities for actual field work along the lines of school surveys and other investigations of the efficiency of school systems. Opportunities are also offered for research work and experimentation in the fields of supervision and class teaching. Such work is carried on under the direct supervision of members of the Faculty, and is an actual part of such regular courses as Education 203A–204A, 403–404, 405–406, 217x–218x, 411–412, 417x–418x, 481–482, and 485–486, described on pages 54, 55, 66, 67, and 70 of this Announcement. During recent years, students in these classes have participated in surveys of the schools of St. Paul, Minnesota; Omaha, Nebraska; Pelham, New York; Nassau County, New York; Framingham, Massachusetts; Great Neck, Long Island; and Paterson, New Jersey.

The second opportunity for practical work is offered by a system of supervised observation and teaching in New York City and vicinity. Graduate students, with or without experience, who seem to the official advisers entirely to be qualified to undertake work of this nature, may be recommended to school principals to do practical work. Many principals welcome the opportunity to secure such assistance, and at the same time to help those who are without experience to learn the real problems and needs of large institutions. Students desiring practical work are expected to arrange in advance a definite period of time for such work (usually half of each school day for five weeks), to teach such classes as may be assigned, to supervise study periods, to fill out reports, to carry on such experiments as the principals may suggest, to attend meetings for criticism, and generally to make themselves part of the teaching staff of the school to which they may be delegated. There is no financial return for this work, but such work is credited toward degrees when supervised and taken as a part of such regular courses as Education 283x-284x, 283, 284, 215x-216x, 217x-218x, and 231x-232x, described on pp. 68, 51, 66, and 63, respectively, of this Announcement. During the year 1918-1919 practical work of this type in both elementary and secondary schools has been done in Leonia, Cliff-side, and Englewood, New Jersey; in the Speyer School; in public high and elementary schools of New York City; and in several private schools in New York. In some of these schools special studies in comparative experimental teaching have been made.

The third opportunity for practical work is offered through the New York City plan of teachers-in-training in high schools. This opportunity is open only to graduate students whose academic qualifications in their several subjects of major interest meet the requirements for high-school teachers in the New York City system. Previous experience in teaching is not required. Candidates must devote to the work at least half and sometimes the whole of each school day for one semester, for which service they receive a nominal payment. Many of the courses in the School of Education of most value to an inexperienced high-school teacher are scheduled so as to leave the morning hours free for such teaching or for observation in the Teachers College schools, or in the public high schools. In this way, the student may secure not only exceptional advantages in practice teaching in some of our best high schools, but may qualify in one year plus one or two summer sessions for the examination for regular license as assistant teacher in the high schools of New York City, and for the degree of Master of Arts.

Students who wish to qualify for a New York City license as teacher-intraining should apply to the Board of Examiners, Department of Education, New York City, for a copy of the regulations concerning teachers-intraining, and make formal application for such work to the Board of Education on blanks furnished for the purpose. Teachers College has no authority whatever in the making of these appointments, but under certain

circumstances will grant credit for such work if the student is also registered for Education 283 or 284 (see page 68). In the first half-year, teachers-in-training begin their work in the city schools the first week in Sep-

tember; in the second half-year, the first week in February.

For students in rural education an opportunity for practical work is provided through the affiliation of the College with Hunterdon and Warren Counties in New Jersey. These counties, lying from fifty to seventy-five miles beyond the city, are typically rural and furnish laboratory facilities for four distinct lines of activity, namely, rural school supervision, rural community organization and surveys, rural nursing, and rural extension in home economics. This practical work is arranged for students in connection with the following courses: Education 273–274, 473–474, and 477–478 (pp. 85–86).

Students who are pursuing courses of investigation or research in educational administration or supervision have exceptional advantages in the school systems of New York and neighboring cities. Within a radius of twenty miles from Teachers College there are 16 cities, 41 boroughs, 2 villages, and 34 towns and townships with a population of approximately 7,000,000. The metropolitan section, including New York City and the area within twenty miles of City Hall, has a school population larger than all New England and equal to that of all the states west of Kansas. One may find here every type of educational institution from one-room country schools to the metropolitan school with hundreds of teachers and thousands of pupils, as administered under the laws of the States of New York, New Jersey, and Connecticut.

COURSES OF INSTRUCTION

General Statement

Odd numbers indicate courses given during the Winter Session; even numbers, those given during the Spring Session. Courses bearing both odd and even numbers extend throughout the academic year. Students wishing to enter such courses at the beginning of the Spring Session (second half-year) should consult in advance with the instructor.

I. All courses in the School of Education numbered 100 and above are of graduate rank and may be counted, subject to the approval of a Faculty adviser, for the degrees of Master of Arts or Doctor of Philosophy, and the Teachers College diplomas. They presuppose courses in educational psychology and the history and principles of education, similar to Education A and B as given in the School of Practical Arts and in Columbia and Barnard Colleges. Students who have not had these introductory courses or their equivalent will be required to take a general introductory course in education as a part of their curriculum (see page 26).

2. Courses designated by numbers above 300 are principally fundamental professional courses, practica, research courses, and seminars. The fundamental professional courses aim to bring together in the first year of graduate study the most important topics which a school superintendent, high-school principal, school supervisor, etc., should know in the practical

pursuit of his profession.

The practica, which are intended for investigation in a limited field, aim to extend the student's knowledge already acquired from introductory courses by means of lectures, collateral reading, experiment, investigation and field work; and, through the preparation of reports and essays, to give practice in approved methods of investigation.

The research courses are especially arranged for the second year of graduate study and in general should be preceded by the corresponding

first year fundamental professional course or its equivalent.

The seminars, the most advanced courses offered by the departments, are devoted to the study of particular topics which are to be made the subjects of dissertations for the degree of Doctor of Philosophy and the Teachers College diploma. With the approval of the Faculty, a practicum and a seminar may be taken in any department of the College.

3. Information concerning the practical work required in connection with certain courses in the theory and practice of teaching is given in

connection with the announcement of each of these courses.

UNIT COURSES IN EDUCATION

The following short unit courses in Education are offered with the purpose of acquainting the student in education: (1) With the views and practices of specialists outside his major department; (2) with special fields of knowledge not covered by the regular courses of the Winter or Spring Sessions. They are open to all students in education without charge and without credit. There is no formal registration for these courses, but cards without credit. There is no other regions the Secretary of the College. Each unit course will consist of exercises covering a period of five weeks. These unit course will consist of exercises covering a period of five weeks. exercises will consist of lectures and discussions.

Unit Courses as Substitute for Master's Essay

In place of the essay required of all candidates for the Master's degree (see p. 26) there may be substituted a written digest of six unit courses. For this purpose any six unit courses may be chosen, but all six units must be taken within the same academic year. It is not necessary, however, to distribute the units uniformly over both the Winter and Spring Sessions. One may make such a distribution as he chooses; it is possible, for example, to select all six units within one session. The digest must include the prominent points of each lecture of each unit, and must be submitted in type-written form (two copies) to the student's adviser not later than January 24 or May 15. The digest of the entire six units must be submitted at the same time, each unit being bound separately.

UNITS OFFERED FOR 1919-20

September 29 to November 1

U1—School Health Administration. Professor Woop. Tu. and Th. at

U21—Common Principles underlying Kindergarten and Elementary Edu-

cation. Professor KILPATRICK. Tu., 7.30-9.20 P. M.

U31a—The Teaching of English and Literature in the Secondary School.

(September 29-October 14 only, counts as half unit.*) Professor

BAKER. Tu. and Th. at 2.10.

U31b—The Teaching of the Social Sciences in the Secondary School.

(October 16-November 1 only, counts as half unit.*) Professor

Gambrill. Tu. and Th. at 2.10.

U41—The Use of the Library. Miss Hall. S., 11–12.50.

U51—Field, Scope, and Problems of Vocational Guidance. Mr. Weaver.

S., 11-12.50.

U71—Organization for Rural Progress. Dr. Wilson. W., 7.30-9.20 P. M. U81—Standards and Tests for Elementary School Subjects. Professor McCall. Tu. at 7.30 P. M.

November 3 to December 6

U2—The Desirable Scope and Character of State Supervision of Various Forms of Education. Professor SNEDDEN. Tu. and Th. at 1.10.

^{*} Any two half units may count as a single unit course.

U22—The Essentials of Kindergarten Practice. Professor Hill and

others. Tu., 7.30-9.20 P. M. U32a—The Teaching of Latin in the Secondary School. (November 3-18 only, counts as half unit.*) Professor Lodge. Tu. and Th. at 2.10.

U32b—The Teaching of Modern Languages in the Secondary School. (November 20-December 6 only, counts as half unit.*) Professor BAGSTER-COLLINS. Tu. and Th. at 2.10.

U52—Vocational Guidance Surveys and Vocational Information. Mr.

Weaver. S., 11–12.50.

U72—Problems and Progress of the Rural School. Professor CARNEY. W., 7.30-9.20 P. M. U82—Standards and Tests for Secondary School Subjects. Professor

KELLEY. Tu. at 7.30 P. M.

December 8 to January 24

U3—The School Census and School Attendance. Mr. Chatfield. Tu. and Th. at 1.10.

U33a—The Teaching of Household Arts in the Secondary School. (December 8-January 6 only, counts as half unit.*) Professor Cooley. Tu. and Th. at 2.10.

U33b—The Teaching of Industrial Training in the Secondary School. (January 8-24 only, counts as half unit.*) Professor Dean. Tu.

and Th. at 2.10.

U53—Vocational Guidance Analyses and Tests. Mr. WEAVER. S..

U73—Problems and Progress of the Rural School. Miss Dunn. W.,

7.30-9.20 P. M. U83—School Surveys. Professors Strayer and Engelhardt. Tu. at 7.30 P. M.

February 2 to March 6

U4—School Architecture. Mr. BETELLE. Tu. and Th. at 1.10.

U24—The Teacher's Responsibility Outside the Classroom. Mr. PATRI. F., 4.10–6.

U34a—The Teaching of the Biological Sciences in the Secondary School. (February 2-17 only, counts as half unit.*) Professor CALDWELL. Tu. and Th. at 2.10.

U34b—The Teaching of the Physical Sciences in the Secondary School.

(February 19-March 6 only, counts as half unit.*) Professor Wood-HULL. Tu. and Th. at 2.10.

U44—Heredity and Eugenics. Professor BIGELOW. M. and W. at 3.10. U54—Vocational Guidance and Vocational Education. Professor DEAN.

S., 11-12.50.

U74—Rural Health and the County School Nurse. Professor Wood and

Miss Hudson. W., 7.30-9.20 P. M.
U84—Education and Nationalism. Professor Reisner, Dean Russell, Professor Monroe, and Dr. Kandel. Tu. and Th. at 3.10. U94—Instincts or Unlearned Tendencies. Dr. Gates. F., 4.10-6.

March 8 to April 10

U5—The Administration of the Junior High School. Professor Briggs. Tu. and Th. at 1.10.

U25-26—Scouting and Camping for Boys. (March 11 to May 27, counts as two unit courses). Professor Fretwell. Th., 8-10 P. M.

^{*} Any two half units may count as a single unit course.

U35a—The Teaching of Music in the Secondary School. (March 8-23 only, counts as half unit.*) Professor FARNSWORTH. Tu. and Th. at 2.10.

U35b—The Teaching of Fine Arts in the Secondary School. (March 25-April 10 only, counts as half unit.*) Professor Dow. Tu. and Th.

at 2.10. U55—Vocational Guidance Values in the Regular School Curriculum.

Professor Bonser. S., 11–12.50.
U75—Household Arts for Country Communities. Professor Spohr. W., 7.30-9.20 P. M. U85—Education and Nationalism. Professor Reisner, Dean Russell,

Professor Monroe, and Dr. Kandel. Tu. and Th. at 3.10.

U95—Habit Formation and Learning. Professor Ruger. F., 4.10-6.

April 12 to May 15

U6—Social Hygiene and Sex-Education. Professor BIGELOW and Miss STACKPOLE. M. and W. at 3.10.

U36a—The Teaching of Mathematics in the Secondary School. (April 12–27 only, counts as half unit.*) Professor SMITH. Tu. and Th. at 2.10.

U36b—The Teaching of Health and Physical Education in the Secondary

School. (April 29-May 15 only, counts as half unit.*) Professor Wood. Tu. and Th. at 2.10.

U46-Scouting and Camping for Girls. Professor Fretwell. S., 2.30-

4.20.

-Economic and Social Aspects of Vocational Guidance. Professor SNEDDEN. S., 11-12.50. U76—Junior Extension Work. Mr. Benson, Miss Dunn, Professor Spohr

and others. W., 7.30-9.20 P. M.
U86—Education and Nationalism. Professor Reisner, Dean Russell, Professor Monroe, and Dr. Kandel. Tu. and Th. at 3.10.

U96-Individual Differences and their Causes. Professor KELLEY. F., 4.10-6.

Units in Elementary Education

The following unit courses are given on Monday, Wednesday, and Friday at 11 o'clock:

U60—General Principles of Teaching as Related to Practice. Mr. Hunt.

September 29-October 17.
U61—The Teaching of English Language and Literature in the Elementary School. Professor Baker. October 20-November 7. U62—The Teaching of Music in the Elementary School. Professor Farns-

WORTH. November 10-26.

U63—The Teaching of Arithmetic in the Elementary School. Professor UPTON. December 1-19.

U64—The Teaching of Physical Education in the Elementary School.

Professor Wood. January 5-23.
U65—The Teaching of Industrial Arts in the Elementary School. Professor Bonser. February 9-27.

U66—The Teaching of History and Civics in the Elementary School. Professor GAMBRILL. March 1-19.

U67—The Teaching of Geography in the Elementary School. Professor McFarlane. March 22-April 9. U68—The Teaching of Nature Study in the Elementary School. Professor

BIGELOW. April 12-30. U69—The Teaching of Art in the Elementary School. Professor Dow. May 3-21.

^{*} Any two half units may count as a single unit course.

Units Grouped According to Subject-Matter

Units 1, 2, 3, 4, and 5 relate to school administration.

Units 6, 21, 22, 24, 25-26, 41, 44, and 46 treat of special educational problems.

Units 31a, 31b, 32a, 32b, 33a, 33b, 34a, 34b, 35a, 35b, 36a, and 36b relate to the teaching of secondary school subjects.

Units 51, 52, 53, 54, 55, and 56 relate to vocational guidance.

Units 61, 62, 63, 64, 65, 66, 67, 68, and 69 relate to the teaching of elementary school subjects.

Units 71, 72, 73, 74, 75, and 76 relate to rural education.

Units 81, 82, and 83 relate to standards and tests.

Units 84, 85, and 86 relate to nationalism and education.

Units 94, 95, and 96 relate to educational psychology.

A group of other unit courses, open to students in the School of Education, and treating of subject-matter in the field of practical arts, is offered by the School of Practical Arts. For a list of these units see the Announcement of the School of Practical Arts.

During the academic year additional unit courses may be offered by the School of Education which will be announced on the official bulletin board.

SCHEME FOR NUMBERING COURSES IN EDUCATION

Numbers 101 to 199 are reserved for introductory courses in special departments.

Numbers 201 to 299 are reserved for introductory courses in general departments.

Numbers 301 to 399 are reserved for advanced courses and practica in special departments

Numbers 401 to 499 are reserved for advanced courses and practica in general departments

Numbers 501 upward are reserved for seminars.

GROUP ASSIGNMENT OF NUMBERS

A. I. July allow C. W. Lovellow	Titura Anta-
Administration of Education 201-210	Fine Arts
401-410	311-314
Educational Sociology 291–294	French
491-494	317-320
Elementary Education 211-220	Geography 121-124
411-420	321-324
History of Education 221-230	
421-430	German 125–130
Lower Primary Education 101-104	325-330
231-240	History
431-440	331-334
Philosophy of Education 241-250	Household Arts
441-450	335-342
Psychology of Education 251-260	Industrial Arts
451-460	343-350
Religious Education	Latin
461-470	
Rural Education	351-354 Mathematics
471-480	357-360
Secondary Education 281-290	Music and Speech 161-170
481-490	361-370
Vocational Education 295-299	Nursing and Health 171-180
495-499	371-380
Biology 105-106	Physical Education 181-194
301-304	381-394
English 107-110	Physical Science 197–199
307-310	397-399
	07. 022

HOW TO FIND COURSES

For a complete list of courses arranged by hours, see pp. 128-132. For a complete list of courses, arranged by numbers, see pp. 124-127.

I-HISTORY AND PRINCIPLES OF **EDUCATION**

Courses in this group are classified as follows: HISTORY OF EDUCATION Philosophy of Education EDUCATIONAL SOCIOLOGY

HISTORY OF EDUCATION

Education B—History and Principles of Education, with special reference to Elementary School Problems. 3 points each Session. Professor Goodsell.

M., W., and F. at 10.

The course is designed to trace the development of educational thought and practice, as these were determined by social, political, economic, and religious conditions in various nations and periods. Stress will be laid upon the origin and development of present-day problems and practices of the elementary school.

Preliminary to advanced courses in education. Not credited toward a higher degree. Graduate students should register for Education 421-422.

Education B1-B2—History of Education. 2 points each Session. Professor Reisner.

S., 9-10.50.

During the Winter Session this course will treat of the History of Education to Modern Times; in the Spring Session it will treat of the History of Education in Modern Times. The course represents two-thirds of Education B described above, and satisfies the requirement in History of Education for undergraduate students in the School of Practical Arts.

Not credited toward a higher degree. Graduate students should register for Education

421-422.

Education 221—History of the Family as a Social Institution. 2 points. Professor Goodsell.

Tu. and Th. at 4.10, Winter Session.

The first part of the course is designed to afford an historical survey of the evolution of the family from primitive times to the age of the Renaissance. The patriarchal type of family organization as it developed in Palestine, Greece, and Rome, and the influence of Christianity upon family life and ideals will receive special attention. The economic and social causes leading to the modern type of family organization as it exists in England and America will next be considered. Finally an analysis will be made of the conditions and problems of the twentieth century family; and the various suggestions of modern writers for its improvement will be discussed and evaluated.

Education 222—Education of Women. Its History and Present Problems. 2 points. Professor Goodsell. Tu. and Th. at 4.10, Spring Session.

The first part of the course will be devoted to a brief historical review of the education of women among the leading nations of ancient and modern times as that education was determined by the social and economic status of women. This historical survey will be merely introductory to a study of the present educational situation with special reference to the problems growing out of the higher education and the specialized training of women.

Education 225-226—History of Education in the United States. Lectures, reports, and discussions. 2 points each Session. Monroe.

Tu. and Th. at 2.10.

The purpose of this course is to present in detail the evolution of the educational practices and institutions of the American people. The elementary school, the secondary school, and the institutions of higher education will be traced through: (a) the period of trans-

planting of European institutions—the town and dame school, the Latin grammar school, and the politico-ecclesiastical college; (b) the period of modification of institutions to suit new conditions—the district school, the academies, and the denominational or independent college; and (c) the period of development of an educational system of free common schools, high schools, state universities, and technical schools, in harmony with American political and social ideals and institutions.

History 345-346—Social and Industrial History of the United States. 3 points each Session. Professor GAMBRILL. Tu. and Th. at 3.10.

For description, see p. 78.

Mathematics 351-352—History of Mathematics. Lectures and collateral reading. 3 points each Session. Professor SMITH.

M. and W. at 3.10.

This course is designed to give a general view of the historical development of the elementary branches of mathematics—arithmetic, algebra, synthetic and analytic geometry, trigonometry, and the differential and integral calculus—from the earliest times to the present. The rise and growth of the higher mathematics chiefly in the nineteenth century are also considered briefly. The course is recommended especially to those who expect to teach mathematics, showing, as it does, the science in evolution and tracing the causes that have led to its development or stagnation in various epochs. The course is so arranged that either half may be taken. Students wishing to do more intensive work in the history of mathematics should register for Mathematics 32-34 instead of 321-32. mathematics should register for Mathematics 353-354 instead of 351-352.

Mathematics 353–354—Practicum in the History of Mathematics. Research and discussions. 4 points each Session. Professor SMITH. M. and W. at 3.10; Tu. and Th. at 10.

This is the course in Mathematics 351-352, together with one extra hour on both Tuesday and Thursday. It is a research course open only to those who desire to study exhaustively the history of one or more special topics. The work will consist chiefly of the critical study of early treatises which are not accessible in English, and therefore should not be undertaken without a fair knowledge of two foreign languages. The course is so arranged that either half may be taken.

Education 395–396—The History of Physical Science. Lectures and collateral reading. 3 points each Session. Professor Woodhull. Th., 10-11.50.

Education 421-422—History of Education. Lectures and conferences. 3 points each Session. Professor Reisner.

S., 9–10.50.

This course involves the study of the educational ideas and practices of those historic periods during which conceptions of education based on fundamental principles have been formulated. The principles thus arrived at through the study of the religious, psychological, and sociological aspects of education are considered in their application to the subjectmatter, method, and institutional organization of education as accepted in the prevailing eclectic conception. The aim of the course is to present the essential features of the educational thought of the past as a basis for the more detailed historic, philosophic, and methodic study of the principles of education as formulated in the present.

Education 421A—Historical Foundations of Modern Education. Lectures and conferences. 3 points. Professors Reisner and Monroe. Tu. and Th. at 3.10, Winter Session.

This course will condense into one session the historical survey of the development of educational ideals and practices from the earliest times through the eighteenth century. While it covers the same ground as Education 421, it offers a more cursory survey, as a basis for the study of historical and contemporary problems given in Education 422A.

Education 422A—Education and Nationalism. The Development of National Systems of Education in Western Europe and America. Lectures and conferences. 3 points. Professor Reisner, Dean Russell, Professor Monroe, and Dr. Kandel.

Tu. and Th. at 3.10, Spring Session.

This course offers a survey of the part which education has played in the development of modern nationalities; it involves particularly a detailed study of the development of the national systems of education during the nineteenth century. Comparative study will be made of the essential features of the most important modern educational systems; and the way in which these features affect social life, the use of educational means for the attainment of political ends, colonial educational policies or the use of education for the improvement of backward peoples, the function of education in retarded cultures, the part which education may play in the reconstruction of nations, will be considered.

Education 422B—Education and Nationalism. The Development of Retarded National Cultures through Education. 3 points. Professor Monroe.

Tu. and Th. at 4.10, Spring Session.

Attention will be given to the following topics: the development of nationalism in recent times; the discovery of education as a means of national development; emergence of Japan as a first-class power through educational measures; America's work in the Philippines as a definite constructive educational endeavor; bearing of education on the developing nationalism in China; the cultural rehabilitation and national reconstruction in the Balkans, in the near east, and in certain colonial possessions of European powers.

while but brief consideration can be given to each topic, the bearing upon these problems of modern educational experience, particularly that of the United States, will form the basis

of the course.

Education 425-426—Practicum. History of Education in the United States. 4 points each Session. Professor Monroe.

Tu. and Th. at 2.10.

This is the same course as Education 225–226 described on p. 42, but with the investigation required for the practicum.

Education 428—Historical and Comparative Study of the Problems of Secondary Education. Lectures and conferences. 3 points. Dr. KANDEL.

M. and W. at 9, Spring Session.

The course traces the evolution of the meaning of a liberal education in modern times and its influence on present-day problems of secondary education in England, Germany, France, and the United States. Special attention is given to organization, curriculum and methods of instruction, and the social conditions affecting the development of secondary schools in these countries.

Education 501-502—Seminar. The Historical Foundations of Modern Education. Professor Monroe.

Hours to be arranged.

The work of the seminar is the critical investigation of topics in connection with dissertation work. Open only to candidates for the Doctor's degree.

For Summer Session courses see p. 97.

For Unit courses see p. 38.

For Teachers College Diplomas see p. 31.

Attention is also called to related courses in the History of Thought and Culture given in other parts of the University and open to students of Teachers College. These courses are described in the Announcements of the University Divisions of History, Economics and Public Law; and of Philosophy, Psychology and Anthropology, which may be had upon application to the Secretary of Teachers College.

PHILOSOPHY OF EDUCATION

Education 241—Philosophy of Education. Introductory course. Lectures, readings, and discussions. 3 points. Professor KILPATRICK.

M., W., and F. at 4.10, Winter Session

Education will be studied as a social agency in relation especially to other factors at work in a democratic society.

Education 245—Logic and Educational Problems. 2 points. Professor Dewey.

M. and W. at 5.10, Winter Session.

This course discusses the method of logical thinking as the basis for the method of teaching and study.

Education 243—Foundations of Method. Lectures, readings, and discussions. 2 points. Professor KILPATRICK.
M. and W. at 3.10, Winter Session.

This course will consider in their more fundamental aspects the principles underlying the method of classroom management and instruction. It will include such topics as the laws of learning, the thinking process, organization, interest and effort, discipline, and moral training, considered in their relationship to a procedure approaching if possible more nearly to the normal experience process.

Education 247—Ethics and Educational Problems. 2 points. Pro-

(Not given 1919-1920.)

The course discusses moral principles involved in education, including the curriculum and school administration, together with some consideration of the problem of instruction in morals.

Education 441—Philosophy of Education. Advanced course. Lectures, readings, and discussions. 4 points. Professor KILPATRICK.

M., W., and F. at 9, Winter Session.

A course made upon the same general plan as Education 241 (see p. 44), but designed for more advanced students and requiring more extended daily preparation.

Education 443-444—Practicum. Philosophy of Education. Lectures, reports, and discussions. 4 points each Session. Professor Kil-PATRICK.

(Not given 1919–1920.)

The general topic will be a consideration of the aims and methods appropriate to a system of education in a democratic society such as ours. The work of the Winter Session will consist largely of a contrast between the total educational situation of America and the analogous situations of England and Germany. The Spring Session will consider more specifically the problems of method, and moral education.

Education 446—Practicum. Historical Relations of Philosophy and Education. 4 points. Professor Dewey. M. and W. at 10, Spring Session.

There will be considered in this course such fundamental problems as the relation of the individual and society; subject and object; knowledge and action; the physical and moral. These problems will be discussed on an historical basis beginning with Bacon.

Prerequisite: Education 241, or its equivalent, and some knowledge of the history of philosophy.

Education 541-542—Seminar. Philosophy of Education. fessors Dewey and KILPATRICK.

Hours to be arranged.

Research in philosophy as applied to education. Open only to candidates for the Doctor's degree with a major in philosophy of education.

For Summer Session courses, see p. 97.

For Unit courses see p. 38.

Attention is also called to related courses in Philosophy, given in other parts of the University and open to students of Teachers College, which are described in the Announcement of the University Division of Philosophy, Psychology and Anthropology, which may be had upon application.

EDUCATIONAL SOCIOLOGY

Education 291-Educational Sociology. Lectures, reports, and discussions. 2 points. Professor SNEDDEN.

M. and W. at 3.10, Winter Session.

An introductory course in the study of the sociological foundations of curricula for schools of general and special education, bearing especially on those fields in which reorganizations of aims or objectives are in progress—such as schools for general secondary, higher elementary or vocational education; schools for defectives and other exceptional classes; and special education, through scouting, playgrounds, practical arts, etc.

Education 292—Problems of School Curricula and Special Forms of Education. Lectures, reports, and discussions. 2 points. Professor SNEDDEN.

M. and W. at 3.10, Spring Session.

Applications of the principles of educational sociology to the evaluation of customary and proposed curricula or subjects of instruction in schools of general or special education. Problems of educational aim or purpose growing out of the development of the junior high school, the reconstruction of general secondary education, the evolution of vocational education, the provision of special education for variant classes, and the extension of novel forms of instruction and training outside the school will receive chief consideration.

Education 205A-206A-Problems for Advisers of Women and Girls. 3 points each Session. Professors STEVENS, GOODSELL, and SNEDDEN, Miss DANIELL, and others.

M., W., and F. at 3.10.

This course considers the problems arising in the care and supervision of women students in colleges and normal schools, and of girls in high schools. The hygienic, economic, social, moral, and religious aspects of the school community will be analyzed and discussed by experts with a broad experience in this field of professional activity. The course is required of all candidates for the diploma of Adviser of Women or Adviser of Girls.

Education 273-274—Rural Sociology and Economics. Lectures, discussions, and reports. 2 points each Session. Dr. WILSON. W. and F. at 10.

For description, see p. 85.

Education 293A—The Assimilation of the Immigrant as an Educational Problem. 2 points.
M. and W. at II, Winter Session.

This course will endeavor (1) to insure a knowledge of immigrant backgrounds on the part of Americans and (2) to suggest educational methods for more rapid assimilation of immigrants into the common life of America.

Education 295-296—Vocational Education. Lectures, readings and reports. 2 points each Session. Professors SNEDDEN and DEAN.

Tu., 7.30-9.20 P.M.

For description, see p. 83.

Education 297-298—Vocational Guidance. Lectures, readings, and reports. 2 points each Session. Mr. Weaver, Professors Snedden, DEAN, and BONSER.

S., 11-12.50.

For description, see p. 83.

Education 332B—Industrial and Social Aspects of History. points. Professor Gambrill.

Tu. and Th. at 4.10, Spring Session.

For description, see p. 77.

History 345-346-Social and Industrial History of the United States. 3 points each Session. Professor GAMBRILL. Tu. and Th. at 3.10.

For description, see p. 78.

Education 470—Practicum. Problems of Social-Religious Work. 3 points.

Hours to be arranged, Spring Session.

Consult Professor Tallman before registration.

This course should be elected by all students desiring advanced degrees in socialreligious work.

Education 491-492—Practicum. Educational Sociology. 4 points each Session. Professor SNEDDEN.

M., 1.10-3.

Studies and investigations of the scope and purposes of education, as based upon modern sociological knowledge and theory. Will include studies of purposes of civic, cultural, and vocational education, and of special forms of education for leaders, specialized workers, delinquents and defectives.

Education 493—Sociological Foundations of Curricula. Lectures, conferences, and reports. 3 points. Professor SNEDDEN. S., 9–10.50, Winter Session.

An advanced course presupposing some knowledge of sociology, and practical experience in some field of education or social work. The larger problems considered will include: analysis of those current contributions of sociology and social economy, which indicate contemporary needs for different or more extended physical, vocational, social, and cultural education than is now offered at various age levels, and for various special classes; investigations of available means of determining desirable specific objectives of education from study of needs and achievements of existing social groups; classification of educa-tional means and methods according to character of objectives to be achieved; and analysis of available means of discriminating objectives realized through extra-school education from those due to school education.

Education 494—Problems of Curricula. Lectures, conferences, and reports. 3 points. Professor SNEDDEN.

S., 9-10.50, Spring Session.

Topics considered will be chiefly those arising in connection with contemporary efforts Topics considered will be chieny those arising in connection with contemporary enforts to evaluate customary curricula and subjects in terms of social needs, to devise better means of meeting existing needs for vocational, civic, and physical education for normal or exceptional classes. The numerous recent developments of special types of school and extra school education will be examined in the light of their possible contribution to social needs. Special consideration will be given to the problems of: the partially adjusted subjects in elementary schools (first six grades); curricula of the junior high school; reconstruction of secondary school curricula.

Education 591-592—Seminar. Educational Sociology. Professor SNEDDEN.

Hours to be arranged.

For Summer Session courses see p. 97. For Unit courses see p. 38. For Teachers College Diplomas see p. 31.

Attention is also called to related courses in Sociology, Social Economy and History of Thought and Culture given in other parts of the University and open to students of Teachers College. These courses are described in the Announcement of the University Division of History, Economics and Public Law, which may be had upon application to the Secretary of Teachers College or the Secretary of the University.

II—EDUCATIONAL PSYCHOLOGY AND MEASUREMENTS

Courses in this group are classified as follows:

EDUCATIONAL PSYCHOLOGY
EDUCATIONAL TESTS AND STATISTICS

EDUCATIONAL EXPERIMENTATION

EDUCATIONAL PSYCHOLOGY

Education 215—Methods of Teaching in Special Classes. 2 points. Miss Farrell.

S., 9-10.50, Winter Session.

This course will present the modifications of the methods and subject-matter of the elementary school which are needed by the types of children found in special classes. Prerequisite or parallel: Education 211-212, 253-254, and 451, or their equivalent.

Education 215x or 216x—Observation, Experimentation, and Teaching in Connection with Special Classes. 2 points either Session. Miss Farrell, Professor Bonser and Professor L. S. Hollingworth.

For description, see p. 51.

Education 216-Supervision of Special Classes. Lectures, readings, and discussions. 2 points. Miss FARRELL. S., 9-10.50, Spring Session.

For description, see p. 58.

Education 251-252—Educational Psychology. 2 points each Session. Dr. GATES.

S., 9-10.50.

This is a Saturday morning section of Education 451 (p. 49) and continues through the Winter and Spring Sessions.

Education 251A-252A—Psychology of Childhood. Observation, experiment, required readings, and discussions. 2 points each Session. Professor Whitley.

Section I: Tu. and Th. at 2.10.

Section II: Tu. and Th. at 4.10.

This course is designed to present the facts, so far as they have been scientifically determined, concerning the nature and development of the mind during childhood, with special reference to the meaning of these facts to the teacher. It seeks to provide the student with sound criteria for estimating theories about the mental life of children, and to give him adequate training in the concrete study of child life.

Education 252B—Psychology of Adolescence. 2 points. Professor L. S. Hollingworth.

W. and F. at 10, Spring Session.

This course offers opportunity for an intensive study of the mental life and conduct of children during the pre-adolescent and adolescent stages of development.

Education 255—The Psychology of Thinking. 2 points. Professor RUGER.

S., 11–12.50, Winter Session.

The work will include: (1) a survey of the results of experimental studies in the higher thought processes; (2) experimental study by the class of the thought processes involved in typical forms of school material; (3) a study of some of the conditions favorable to efficiency in thinking. The psychological laboratory will be used in connection with this course.

Education 256—The Experimental Psychology of Habit, Skill, Practice, and Memory. 2 points. Professor Ruger.

S., 11-12.50, Spring Session.

The work of the course will include: (1) a survey of experimental studies in habit formation; (2) group and individual investigations by the class in the formation of habits and acquisition of skill, etc., from the standpoint of efficiency in learning and possible transfer

Education 253-254—Psychology and Treatment of Exceptional Children. 2 points each Session. Professor L. S. Hollingworth. Section I: S., 9-10.50.

Section II: S., 11-12.50.

This course is designed to give a scientific understanding of children and adolescents who deviate from the normal. It describes such conditions as precocity, backwardness, feeble-mindedness, nervous instability, specialized intellectual defects, juvenile delinquency, etc. It treats also of the application of psychological tests in educational diagnosis. Clinical material will be provided for direct study.

The sections are limited in size and the student's choice of section must be approved by

the instructor.

Education 451—Educational Psychology. 4 points. Professor L. S. HOLLINGWORTH and Dr. GATES.

M., W., and F. at 9, Winter Session.

This course gives a general treatment of the elements of educational psychology. It is designed to meet the needs of graduate students who have had little or no previous training in psychology.

Education 453-454—Practicum. Application of Psychological and Statistical Methods to Education. 4 points each Session. Professors THORNDIKE and McCall.

M., 4.10–6.

For description, see p. 50.

Education 455—Clinical Psychology. 3 points. Professor L. S. HOLLINGWORTH and Miss CHASSELL.

F., 4.10-6, Winter Session.

An advanced course consisting of lectures, readings and supervised case studies. object of the course is to teach case-taking to students intending to become professional psychologists. Opportunity will be given to see cases at Bellevue Hospital. Admission to the course is by consent of the instructors.

Education 456—Mental Adjustments. 3 points. Professor L. S. HOLLINGWORTH.

F., 4.10–6, Spring Session.

The chief purpose of this course is to provide advanced students with an understanding of the psychological processes which lead to abnormal behavior; and to suggest methods of prevention and treatment from the educational and re-educational point of view.

Prerequisite or parallel: Fundamental courses in normal psychology.

Education 456A—Mental and Vocational Tests and Treatment of Results. 3 points. Professor Ruger.
Tu. and Th., 4.10-6, Spring Session.

For description, see p. 53.

Education 458A—Psychology of the Elementary School Subjects. 3 points. Professor THORNDIKE and Dr. GATES.

M., W., and F. at 2.10, Spring Session.

The psychology of learning in the case of the language arts, arithmetic, handwriting, drawing, and elementary science. For principals and supervisors of elementary schools and teachers in normal schools.

Prerequisite: Education 451 or equivalent. A student may not count both 458A and 458B for credit.

Education 458B—Psychology of the Secondary School Subjects. 3 points. Professor RUGER.

M. and W. at 11, Spring Session.

The psychology of learning in the case of foreign languages, algebra and geometry, inductive and deductive work in science and history, esthetic appreciation, and motor skill-

The applications of social psychology to the problems of school athletics and clubs. The diagnosis of capacities, and vocational guidance.

Prerequisite: Education 451 or its equivalent.
A student may not count both 458A and 458B for credit.

Education 459-460—Educational Psychology—Advanced Course. 3 points each Session. Professor THORNDIKE and Dr. GATES.

M. and W. at II.

A systematic course treating of the psychological basis of educational theory.

Prerequisite: A substantial course in psychology, representing at least one-fourth of a student's work for a year.

Education 553-554—Seminar. Educational Psychology. Professor THORNDIKE.

Th., 2.10-4.

In this course an opportunity is afforded for the investigation of those topics in educational theory and practice which lend themselves to treatment by the methods of psychological research.

The courses listed above, being designed primarily to meet the needs of special groups of students, are characterized by some duplication of content and are subject to the following limitations of credit:

A student may not count both 458A and 458B for credit. A student may not count both 255-256 and 451 for credit.

Undergraduate Courses in Educational Psychology

Education A1—See the Announcements of Barnard College and Columbia College.

Education A3 (or A4)—Elements of Psychology for Teachers. See the Announcement of Teachers College, School of Practical Arts.

Education 19—Application of Psychology to Teaching. See the Announcement of Teachers College, School of Practical Arts.

For Summer Session courses see p. 98.

For Unit courses see p. 38.

For Teachers College Diplomas see p. 31.

Attention is also called to related courses in Psychology given in other parts of the University and open to students of Teachers College. These courses are described in the Announcement of the University Division of Philosophy, Psychology and Anthropology, which may be had upon application to the Secretary of Teachers College or the Secretary of the University.

EDUCATIONAL TESTS AND STATISTICS

Education 453-454—Practicum. Application of Psychological and Statistical Methods to Education. 4 points each Session. Professors THORNDIKE and McCall.

M., 4.10-6.

This course aims to prepare advanced students to investigate such problems in education as involve accurate treatment of mental characteristics, and to provide future principals and superintendents of schools with the technical knowledge of statistics which will enable them to use conveniently and profitably the data available in any school system.

Education 456A—Mental and Vocational Tests and Treatment of Results. 3 points. Professor RUGER. Tu. and Th., 4.10-6, Spring Session.

For description, see p. 53.

Education 203-204—Methods and Results of School Surveys. 3 points each Session. Professors Strayer and Engelhardt, and Mr. Evenden.

Tu., 4.10-6.

For description, see p. 54.

Education 203A-204A—School Surveys and Other Investigations in Educational Administration, including Field Work. 4 points each Session. Professor Trabue and Mr. Evenden.

S., 9-10.50.

For description, see p. 54.

Education 211x-212x—Experimental Education in the Elementary School. 2 points each Session. Professor McCall.

Hours to be arranged with the instructor.

For description, see below.

Education 297-298—Vocational Guidance. Lectures, readings, and reports. 2 points each Session. Mr. Weaver, Professors Snedden, Dean, and Bonser.

S., 11-12.50.

For description, see p. 83.

Education 411B-412B—Measurement and Experimentation in Elementary Education. 3 points each Session. Professor McCall.

S., 9-10.50.

For description, see below.

For Summer Session courses see p. 98.

For Unit courses see p. 38.

For Teachers College Diplomas see p. 31.

EDUCATIONAL EXPERIMENTATION

Education 411B-412B—Measurement and Experimentation in Elementary Education. 3 points each Session. Professor McCall. S., 9-10.50.

This course gives a knowledge of the instruments, and the experimental and statistical technique for measuring elementary instruction. It includes such topics as relation of quantitative measurements to educational aims; tests and scales; scoring, tabulation, and statistical treatment; administration of experiments; interpretation, description and uses of the results for the improvement of instruction. The course concludes with a critical survey of the literature in this field.

This course is suited to the needs of teachers and supervisors.

Education 211x-212x—Experimental Education in the Elementary School. 2 points each Session. Professor McCall.

Hours to be arranged with the instructor. The course may be entered

at the beginning of either Session.

This course gives actual experience in measuring the results of instruction, and in the statistical treatment, interpretation, and description of results. The student will plan and conduct, under the supervision of the instructor, an experiment looking to the solution of some problem which has to do with the curriculum, methods of study, methods of instruction, or some similar phase of elementary education.

Education 215x or 216x—Observation, Experimentation, and Teaching in Connection with Special Classes. 2 points either Session. Miss Farrell, Professor Bonser and Professor L. S. Hollingworth.

This course offers opportunities for students to teach in special classes under supervision and criticism. It also offers opportunities to advanced students to conduct investigations or experiments in special classes with the co-operation of one or all of those in charge of the course.

Prerequisite or parallel: Education 253-254 or Education 215.

Education 217x-218x—Experimental Supervision, and Teaching. 2 points each Session. Miss DAY and Mr. HUNT.

Hours to be arranged.

For teachers of experience opportunities are given for carefully supervised experimental teaching under typical school conditions. Regular practice will also be provided for students who have a limited amount of teaching experience and who are unprepared for experimental work.

The work will usually require two hours in the forenoons of five consecutive weeks in

addition to the two weekly class periods throughout the Session.

Education 231x-232x—Experimental Teaching and Practice in Supervision in the Lower Primary School. Experimentation, teaching, supervision, and conferences. 2 points each Session. Miss Moore. Hours to be arranged.

This course will usually require two consecutive hours in the forenoon every school day for five consecutive weeks. Students should advise with the instructor before registering for the course.

Open only to students who have had experience in both kindergarten and primary teaching, and intended especially for candidates for the diploma in lower primary supervision. Education 411B-412B, though not required, is a desirable preliminary or parallel course,

Education 283x-284x—Experimental Teaching in Secondary Schools. 2 points each Session. Professors Stevens and Kelley, Miss Sturtevant, and Mr. Morrison.

Hours to be arranged.

This course affords an opportunity for teachers with some experience in the classroom and training in psychology to work out practically experiments in teaching and to measure their results. Problems of directed learning, memorization, retention, application, improvement by different methods, and the like, may be undertaken.

Education 256—The Experimental Psychology of Habit, Skill, Practice, and Memory. 2 points. Professor Ruger.

S., 11–12.50, Spring Session. For description, see p. 49.

Education 140x—Field Work in Household Arts for Rural Communities. 2 points. Professor Spohr.

Hours to be arranged, Spring Session.

For description, see p. 84.

Education 203-204—Methods and Results of School Surveys. 3 points each Session. Professors Strayer and Engelhardt, and Mr. Evenden.

Tu., 4.10-6.

For description, see p. 54.

Education 203A-204A—School Surveys and Other Investigations in Educational Administration, including Field Work. 4 points each Session. Professor Trabue and Mr. Evenden.

S., 9-10.50.

For description, see p. 54.

Education 261x-262x—Field Work in Social-Religious Centers. 2 points each Session. Professor TALLMAN and others.

Conference hour, F. at II. Field work to be arranged with the instructor. For description, see p. 88.

Education 283 or 284—Supervised Observation and Teaching in the Secondary School. 2 points either Session. Professor Stevens, Miss Sturtevant, and Mr. Morrison.

Conference hour, Friday at 4.10.

For description, see p. 68.

Education 417-418-Advanced Experimentation in Supervision and Teaching. 3 points each Session. Miss DAY.

Hours to be arranged.

This course is intended for students desiring to conduct extended laboratory or field researches in elementary instruction or supervision. A study is made (a) of the technique of experimental teaching, (b) of problems demanding this type of investigation, (c) of the respective functions of teacher and supervision in this work, and (d) of some of the fundamental principles underlying supervision. Each student will conduct an individual experiment of his own selection and participate in the supervision of others.

In general students will reserve one hour every morning for the experimentation. Con-

. sent of the instructor is required.

Prerequisite or parallel: Education 411-412 or its equivalent and Education 411B or its equivalent.

Education 417x-418x-Experimental Supervision, Teaching, and Field Work. 2 points each Session. Miss DAY.

Hours to be arranged.

Additional field work in connection with Education 417-418.

Education 456A—Mental and Vocational Tests and Treatment of Results. 3 points. Professor Ruger. Tu. and Th., 4.10-6, Spring Session.

The purpose of the course is: (1) to give acquaintance with the wide range of psychological, educational, and vocational tests and scales now available; (2) to give practice in the statistical treatment of results and in the standardization of new tests. The psychological laboratory and workshop will be available for use in connection with this course. No acquaintance with statistical methods is presupposed.

For Summer Session courses, see p. 98.

For Teachers College Diplomas, see p. 31.

III—EDUCATIONAL ADMINISTRATION AND SCHOOL SUPERVISION

Courses in this group are classified as follows:
Administration of Education
Comparative Education
Supervision of Instruction
Educational and School Hygiene

ADMINISTRATION OF EDUCATION

Education 201-202—The Principles of Educational Administration. 2 points each Session. Professors Strayer and Engelhardt, and Mr. Evenden.

Section I: W., 4.10-6. Section II: S., 11-12.50.

This course is intended primarily for students who are taking their major work in fields other than educational administration. The course involves the interpretation of the principles and policies of educational administration for those who are planning to become supervisors, high school and elementary school principals, and classroom teachers.

principles and policies of educational administration for those who are planning to become supervisors, high school and elementary school principals, and classroom teachers.

The topics to be considered will include the following: the organization and administrative control of state, county, and city school systems; the problems of centralization in school administration, taxation for school purposes, distribution of state school funds, and school budgets; the training of teachers, the development of courses of study, the control of text-books, inspection and supervision of schools; the relationship of the city school boards to the professional staff, the business administration of schools, standardization of buildings and equipment, school hygiene and sanitation; the organization of the local supervisory corps, the progress and classification of children, the adjustment of school curricula to individual needs, types of school records and reports and other problems of interest to those who are engaged in professional school work.

Education 203-204—Methods and Results of School Surveys. 3 points each Session. Professors Strayer and Engelhardt, and Mr. Evenden.

Tu., 4.10-6.

A consideration of the problems subject to investigation in the organization and administration of the public school systems of the United States, treated from the view-point of the needs of high school and elementary school principals, supervisors of schools, and class-room teachers. The literature, methods, purposes and results of educational surveys will form the content of the course. Opportunity will also be afforded students to actually participate in original school inquiries. An elementary treatment of educational statistics will be given during the first few meetings of the class in order to enable students to interpret statistical studies in administration. In this section of the course special emphasis will be placed on the organization of the school program, the classification and progress of children, the efficiency of supervisors, the measurement of the achievement of children, training and tenure of teachers, the organization and work of the school board and other topics of special importance to those who are interested in professional service.

Education 203A-204A—School Surveys and Other Investigations in Educational Administration, including Field Work. 4 points each Session. Professor Trabue and Mr. Evenden.

Open to those who have secured the consent of the instructors.

S., 9-10.50.

This section of the survey course is designed primarily for superintendents and principals of schools who wish to conduct in their own schools inquiries looking toward increased educational efficiency. As a basis for the study of scientific methods in educational administration, each student will, from time to time, be required to collect and present in class, for criticism as to content and method, data from his own school system with regard to the character of the school population; census and attendance; classification and progress ochildren; size of classes; failures by classes and by subjects; measurements of the achievements of children; efficiency of supervisors; provisions for physical welfare of pupils; organization and work of the school board; training and tenure of teachers; salary schedules; school buildings and equipment; costs; records; reports, and the like.

Education 205A-206A-Problems for Advisers of Women and Girls. 3 points each Session. Professors Stevens, Goodsell, and Snedden, Miss Daniell, and others.

M., W., and F. at 3.10.

This course considers the problems arising in the care and supervision of women students in colleges and normal schools, and of girls in high schools. The hygienic, economic, social, moral, and religious aspects of the school community will be analyzed and discussed by experts with a broad experience in this field of professional activity. The course is required of all candidates for the diploma of Adviser of Women or Adviser of Girls.

Education 403-404—Fundamental Professional Course Superintendents of Schools. 6 points each Session. Professors STRAYER and Engelhardt, and Mr. Evenden.

Tu. and Th., 9-11.50.

This course will bring together the knowledge necessary for one who would administer intelligently the schools of a state, county, or city. It is required of all candidates for the Teachers College Diploma in this field.' The course will be based upon lectures, readings and reports, information derived from visits to schools and participation in the work of administration in school offices, and upon results which are made available through school

surveys in which the members of the group participate.

Among the topics which will receive attention are the following: national participation in education; national and state support and supervision of education; the organization of school systems, to include special treatment of the development of intermediate schools, the junior college, vocational schools, lecture courses, and community centers; the financing of public education, including the study of taxation, budget making, the buying, storing, and distributing of supplies, and the like; school records and school statistics; the attendance, classification, and progress of children, to include a consideration of special classes, dance, classification, and progress of children, to include a consideration of special classes, the continuing census, retardation, elimination, and the like; the organization of newer types of education; extra-curricular activities, to include the work of the Boy and Girl Scouts, Junior Red Cross, boys' and girls' agricultural clubs, and the like; school health administration; the school plant and equipment, to include a consideration of building plans, standardization of equipment and of building, school hygiene and sanitation; the preparation, selection, tenure, salaries, pensions and promotion of teachers; the organization of the supervisory corps, with special reference to the democratization of administration and supervision; the selection of text-books; the making of courses of study; developing school programs; the measurement of classroom achievements; reports and publicity; methods of securing co-operation with other public welfare agencies; the methods and results of school surveys. results of school surveys.

Education 405-406—A Research Course for Superintendents of Schools. 6 points each Session. Professors STRAYER and ENGELHARDT, and Mr. EVENDEN.

W., 9-11:50.

This course is intended primarily for, and is required of, superintendents of schools who are candidates for the Doctor's degree, and who hope to satisfy the research requirement are candidates for the Doctor's degree, and who hope to satisfy the research requirement by work having to do directly with the development and improvement of public school systems. A very large part of the work of the course will center in field work, to which students will be expected to devote from one month to an entire session. Students in this group, will, under the direction of those in charge of the course, conduct school surveys, undertake special problems of investigations for state, county, and city school systems. The problems selected for work in any year will vary with the demand from the field and

with the interests of the group.

The following are types of problems which have already been undertaken by students in this field: the drafting of state school codes and of particular state school laws; the reorganization of school systems; complete surveys of state, county, and city school systems; the planning of school buildings and the development of a school building program; tems; the planning of school buildings and the development of a school building program; the reorganization of fiscal and other records for schools; the organization of the business department of a school system; the plan of a bureau of attendance and permanent census; the reorganization of the finances of the school system on an adequate budgetary basis; the introduction of special classes, special schools, and the more modern subjects in the public school system; the development of standards in educational administration, standard costs; score card for measuring school buildings, methods of rating teachers, standardization of teachers' marks, the development of salary schedules, and the like.

Education 202B-Rural School Administration and the Rural High School. 2 points. Professors CARNEY and BRIGGS.

Hours to be arranged, Spring Session.

For description, see p. 84.

Education 288—Organization and Administration of the Junior High School. 2 points. Professor Briggs.

M. and W. at 9, Spring Session. For description, see p. 69.

Education 288A—Administration Problems of the High School. 2 points. Professor F. W. JOHNSON.

S., 11–12.50, Spring Session. For description, see p. 69.

Education 473-474—Practicum. Rural Social Surveys. 4 points each Session. Dr. Wilson.

F., 3.10-5.

For description, see p. 85.

Education 497-498—Organization and Supervision of Vocational Education. 6 points each Session. Professor Dean.

Hours to be arranged. For description, see p. 84.

For Summer Session courses, see p. 98.

For Unit courses, see p. 38.

For Diplomas in Educational Administration, see p. 31.

Attention is also called to related courses in Economics and Social Economy given in other parts of the University and open to students of Teachers College. These courses are described in the Announcement of the University Division of History, Economics and Public Law, which may be had upon application to the Secretary of Teachers College or the Secretary of the University.

COMPARATIVE EDUCATION

Education 203C-204C—Education and Reconstruction in Europe. 2 points each Session. Dr. KANDEL.

S., 9-10.50.

A comparative study of the changing social and political conditions underlying the administration of education, and their relation to the organization, curricula, and the methods of teaching in the school systems of the chief European countries and the United States. Special attention will be given to proposals for reconstruction and education.

Education 203B—Educational Development in Oriental Countries. 2 points. Dr. Sailer.

Hours to be arranged, Winter Session.

The course will outline the development of the educational systems of India, the Philippines and Egypt, and indicate the problems of education in the Orient generally, including missionary education.

Education 269-270—Problems in Missionary Education. Lectures, readings, discussions, and inspection of schools. 2 points each Session. Dr. Saller.

M. and W. at 10.

This course is intended for foreign missionaries on furlough and missionary candidates looking forward to educational work. It will discuss the distinctive aims of foreign missionary education, and the bearings on these of certain features of modern educational theory and practice. Missionaries from different fields will have an opportunity to compare their problems. Those taking the course will select subjects for special study and present them to the class for discussion.

Candidates for the Master's degree specializing in this field may do extra work in connection with this course which will be accepted to satisfy the requirements of the Master's

essay (see p. 26).

Education 407-408—Practicum. Comparative Education. 3 points each Session. Dr. KANDEL.

Hours to be arranged.

The course will consist of consultations and special studies, and is intended for students who desire in connection with their dissertation to interpret problems of American education in the light of foreign experience.

Education 422A—Education and Nationalism. The Development of National Systems of Education in Western Europe and America. 3 points. Professor Reisner, Dean Russell, Professor Monroe, and Dr. Kandel.

Tu. and Th. at 3.10, Spring Session.

For description, see p. 43.

Education 422B—Education and Nationalism. The Development of Retarded National Cultures through Education. 3 points. Professor Monroe.

Tu. and Th. at 4.10, Spring Session.

For description, see p. 44.

Education 428—Historical and Comparative Study of the Problems of Secondary Education. Lectures and conferences. 3 points. Dr. Kandel.

M. and W. at 9, Spring Session.

The course traces the evolution of the meaning of a liberal education in modern times and its influence on present-day problems of secondary education in England, Germany, France, and the United States. Special attention is given to organization, curriculum and methods of instruction, and the social conditions affecting the development of secondary schools in these countries.

For Unit courses, see p. 38.

For Teachers College Diplomas, see p. 31.

SUPERVISION OF INSTRUCTION

Courses in the Methods of Teaching will be found under Group IV, on pages 61-82.

Education 213A—Class Management. 2 points. Professor BAGLEY. M. and W. at 5.10, Winter Session.

Primarily for students who are planning to supervise instruction in elementary schools or to serve as critics or supervisors in normal schools. Lectures, class discussions, and reports of observations centering about the following topics: the life of the school as an educative agency; the organization and influence of classroom routine; program-making; attendance; marking and grading; discipline. The course will conclude with a discussion of professional ethics.

Education 213B—Socializing the Elementary School Curriculum. 2 points. Professor Bonser.

M. and W. at 4.10, Winter Session.

For description, see p. 65.

Education 214A—The Technique of Teaching. 2 points. Professor BAGLEY.

M. and W. at 5.10, Spring Session.

Designed especially for students who are preparing to work in administration and supervision.

Types of school activities classified upon the basis of outcomes; the principles governing the technique of teaching in connection with each type of activity.

Education 211x-212x—Experimental Education in the Elementary School. 2 points each Session. Professor McCall.

Hours to be arranged with the instructor. The course may be entered at the beginning of either Session.

For description, see p. 51.

Education 216—Supervision of Special Classes. Lectures, readings, and discussions. 2 points. Miss FARRELL.

S., 9-10.50, Spring Session.

This course is designed for students who are planning to become principals or super-intendents of schools or instructors and supervisory officers in teachers' training schools. The general need for special classes, the types now offered in various parts of the country, the desirability of providing for still further differentiation and the modifications of general supervisory principles needed in dealing with these classes are among the topics that will be disquested in this course.

be discussed in this course. Education 217x-218x—Experimental Supervision and Teaching.

2 points each Session. Miss DAY and Mr. HUNT. Hours to be arranged.

For description, see p. 66.

Education 231x-232x-Experimental Teaching and Practice in Supervision in the Lower Primary School. Experimentation, teaching, supervision, and conferences. 2 points each Session. Miss Moore.

Hours to be arranged. For description, see p. 63.

Education 275-276—The Preparation of Rural Teachers. 2 points each Session. Professor CARNEY.

Tu. and Th. at 9.

For description, see p. 85.

Education 277-278—Rural Supervision. 2 points each Session. Miss DUNN.

Tu. and Th. at 11.

For description, see p. 85..

Education 411-412-Fundamental Professional Course for Elementary School Principals, Supervisors, and Critic Teachers. 6 points each Session. Professor Bonser and others.

Tu. and Th., 9–10.50, and additional hours to be arranged.

For description, see p. 66.

Education 411A-412A—Criticism and Supervision of Instruction in the Elementary School, with Special Reference to the Making of a Curriculum. Lectures, required readings, and discussions. 3 points each Session. Professor McMurry.

(Not given during the year 1919–1920.)

This course is designed for graduate students who are planning to become principals or superintendents of elementary schools, or instructors and supervisory officers in teachers'

training schools.

The meaning and bearings of the modern view-point in elementary education will first be discussed; and, in the light of conclusions thus reached, actual recitations in history, geography, etc., will be observed and criticized. Special topics for consideration will be: the making of a curriculum; standards for judging instruction; general principles of criticism of instruction; proper method of study on the part of both adults and of children.

Education 411B-412B—Measurement and Experimentation in Elementary Education. 3 points each Session. Professor McCall.

5., 9-10.50.

This course gives a knowledge of the instruments and the experimental and statistical technique for measuring elementary instruction. It includes such topics as: relation of quantitative measurement to educational aims; tests and scales; scoring, tabulation, and statistical treatment; administration of experiments; interpretation, description and uses of the results for the improvement of instruction. The course concludes with a critical survey of the ligentrum this distance. vey of the literature in this field.

This course is suited to the needs of teachers and supervisors.

Education 411C-412C-Criticism and Supervision of Instruction in the Elementary School, with Special Reference to Methods of Study. 3 points each Session. Professor McMurry.

(Not given during the year 1919-1920.)

This course will deal with the problems of supervision. It will differ from Education 411A-412A by making proper method of study on the part of young people the principal topic. Recitations will be observed in history, geography, etc., with regard to the method of study followed, and the conduct of study periods will receive attention. Standards for judging instruction and general principles of criticism of instruction will be considered, but in a minor way.

Education 413-414—Problems in Supervision in the Elementary School, as Related to Social Reconstruction. 3 points each Session. Miss DAY.

S., 9-10.50.

This course is planned for supervisors, principals, critic-teachers and others who wish an intensive study of elementary school activities. The course will consist in (a) a brief introductory survey of modern educational theory for the control of class procedure, and its psychological foundations, (b) the study, analysis and criticism of demonstration lessons in elementary school subjects, (c) a study of the principles upon which skilful supervision is based, and (d) investigations into the practice of successful supervision. Special attention will be given to the place of the supervisor, teacher, and pupil in the problems of social reconstruction, to social phases of the recitation, teaching children how to study, and to the special functions of the supervisor.

Education 415-416—Fundamental Professional Course for Normal School Teachers, Supervisors, and Administrators. 4 points each Session. Professor BAGLEY.

Tu. and Th., 10-11.50. For description, see p. 61.

Education 417-418—Advanced Experimentation in Supervision and Teaching. 3 points each Session. Miss DAY

Hours to be arranged. For description, see p. 67.

Education 417x-418x-Experimental Supervision, Teaching, and Field Work. 2 points each Session. Miss DAY.

Hours to be arranged.

Additional field work in connection with Education 417-418.

Education 431-432—Practicum. Current Problems in Supervision and the Training of Teachers of Young Children. Lectures, discussions, and reports, introductory to independent investigation. 4 points each Session. Professor HILL and Miss Brown.

M., W., and F. at 10.

This course is planned for experienced teachers who are preparing for supervision or the training of teachers of young children. A critical study will be made of the best curricula in representative normal schools with a view to determining the balanced proportions of theory, observation, and practice, and the most educative presentation of the activities and

materials to young women practice, and the most educative presentation of the activities and materials to young women preparing for the teaching of young children.

Such practical problems of supervision as salaries, examinations, purchasing and distribution of materials, double session, the planning of hygienic rooms, sanitation, parents' classes and clubs, and teachers' study classes, will be studied, and a comparison made of the methods in representative systems observed and investigated.

Prerequisite or parallel: Education 435–436, and 243.

Education 435-436—Critical Study of Curricula and Experiments in the Education of Young Children. Lectures, required readings, discussion, and investigation. 3 points each Session. Professor HILL and Miss Brown.

M., W., and F. at 2.10.

Section I: For experienced teachers.

Section II: For students without experience in teaching. Observation and investigation or demonstration required.

This course is designed to meet the needs of teachers in the kindergarten-primary field who wish to approach the problem from the experimental rather than the traditional point of view.

A study will be made of educational possibilities and curricula for the kindergartenprimary period in the light of present-day child study, and a comparison will be made with the conceptions of Froebel, his predecessors and successors. Representative curricula in use in kindergarten today will be critically studied together with those in process of making in experimental classes.

Education 533-534—Seminar. Elementary Education. Professor

Hours to be arranged.

The work of the seminar is the critical investigation of topics in connection with the dissertation work. Open only to candidates for the Doctor's degree.

For Summer Session courses, see page 99.

For Unit courses, see page 38.

For Diplomas in Supervision, see pages 31-32.

EDUCATIONAL AND SCHOOL HYGIENE

Biology 104—Biology in Education and Social Work. Lectures, readings, discussions, and laboratory demonstrations. 2 points. Professor BIGELOW and Miss STACKPOLE.

M. and W. at 3.10, Spring Session.

A course which presents the leading facts and generalizations of biology—especially of evolution, heredity, embryology, and general physiology—which have important bearings upon education and social work. Several weeks of the course will be devoted to a survey of social hygiene and sex-education.

Education 183-184-Educational Hygiene. Lectures, collateral reading, demonstration, and reports. 2 points each Session. Professor WOOD.

M. and W. at 2.10.

Education 183 takes up health education with special reference to the needs and work Education 183 takes up neatine deducation with special reference to the needs and work of teachers. This course deals with hygiene and sanitation, considering the range and distribution of the material in this field for the needs of the individual and as a basis of health instruction. In the professional side of the course, students prepare typical lessons for health teaching of various types and present some of these to the class in the form of practice teaching. Students have experience also in the preparation of courses of study in the field of health education.

the field of health education.
Education 184 deals with various phases of school hygiene. The chief topics of the course are: the place and scope of school hygiene in education; the physical organization and comparative development of the child; health examinations of children; control of communicable diseases in schools; discovery and treatment of chronic health defects; school sanitation; the hygiene of instruction; principles of health education with a brief review of materials and methods taken up in detail in the Winter Session; physical education with discussion of the various types of motor activities involved in the physical education of children of different ages and different types; application of principles of hygiene and physical education in the special education of abnormal and exceptional children.

Education 187-188—Hygiene of Childhood and Adolescence, including Sex-Education. Lectures, reference reading, discussions, and reports. 2 points each Session. Professor Wood.

Lecture, S. at 11. Conference, S. at 12.

Education 187 deals with these topics: the principle of projected consciousness as applied in the nurture and education of children; brief review of organic evolution, heredity and prenatal influence; consideration of eugenics; application of biologic principles in care of infancy and childhood; relation of physical welfare to other values in the life of the child. Education 188 deals with the following topics: significance and value of the lengthened period of immaturity in the human species; adolescent development with normal and abnormal characteristics; sex development with the direct and indirect influences upon the individual at various stages of growth; mental and emotional hygiene; education of the instincts and emotions; education for parenthood involving sex-hygiene and sex-education, with other factors. with other factors.

For courses in Physical Education, see p. 95.

For Summer Session courses, see p. 106.

For Unit courses, see p. 38.

IV—THEORY AND PRACTICE OF TEACHING

Courses in this group are classified as follows: METHODS OF TEACHING IN NORMAL SCHOOLS METHODS OF TEACHING IN LOWER PRIMARY METHODS OF TEACHING IN ELEMENTARY SCHOOLS METHODS OF TEACHING IN SECONDARY SCHOOLS

> GENERAL COURSES GERMAN BIOLOGY HISTORY ENGLISH LATIN French and Spanish MATHEMATICS GEOGRAPHY PHYSICAL SCIENCE

METHODS OF TEACHING IN NORMAL SCHOOLS

Education 415-416-Fundamental Professional Course for Normal School Teachers, Supervisors, and Administrators. 4 points each Session. Professor BAGLEY.
Tu. and Th., 10-11.50.

A required fundamental course for graduate students who are planning to serve as teachers, supervisors, or administrators in institutions for the professional preparation of teachers, and who are candidates for the Teachers College Diploma in this field. Students

teachers, and who are candidates for the Teachers College Diploma in this field. Students may enrol for either session or for both sessions.

Winter Session: Curricula for the professional preparation of teachers: (a) principles underlying the construction of such curricula; (b) conditions affecting entrance requirements, residence requirements, prescription vs. election, curriculum differentiation; (c) short curricula on the secondary and collegiate levels, with especial reference to the preparation of rural school teachers; (d) longer curricula on the collegiate level; (e) types of subjectmatter and theoretical courses; (f) organization of participation and practice teaching; (e) supervision of student teachers

matter and theoretical courses; (1) organization of participation and practice teaching; (g) supervision of student teachers.

Spring Session: Normal school administration: (a) the organization, control, and support of institutions for the preparation of teachers; (b) types of public control; national, state, county, municipal; (c) boards of control; (d) the internal organization of normal schools: administrative and teaching staffs, departmental organization, the special problems of training school organization; (e) normal school standards; (f) normal school accounting, student hour costs, and budget making; (g) administration of credits; (h) the social life of the normal school as a factor in the preparation of teachers; (i) special problems of promel school extension. lems of normal school extension.

Education 419–420—Practicum in the Professional Preparation of Teachers. 4 points each Session. Professor Bagley.

W., 3.10-5.

Registration in this course is limited to those who have completed Education 415 or Education 416. The work will be centered about individual problems of an administrative, supervisory, or curricular nature. Field work will be expected of those undertaking administrative or supervisory problems.

Education 411-412—Fundamental Professional Course for Elementary School Principals, Supervisors, and Critic Teachers. 6 points each Session. Professor BONSER and others.

Tu. and Th., 9-10.50, and additional hours to be arranged.

For description, see p. 66.

Education 213A—Class Management. 2 points. Professor Bagley. M. and W. at 5.10, Winter Session.

For description, see p. 57.

Education 275-276—The Preparation of Rural Teachers. 2 points each Session. Professor CARNEY.

Tu. and Th. at 9.

For description, see p. 85.

Education 303-304—Practicum in Teaching Biological Sciences. 4 points each Session. Professors BIGELOW and BROADHURST.

Hours to be arranged. For description, see p. 71.

Education 306A—The Teaching of English in Normal Schools. 3 points. Professor BAKER.

F., 10-11.50, Spring Session. For description, see p. 72.

Education 397-398-Practicum in Physical Science. 4 points each Session. Professor Woodhull.

S., 11-12.50. For description, see p. 82.

For Summer Session courses, see p. 98.

For Teachers College Diplomas, see p. 31.

METHODS IN LOWER PRIMARY

(KINDERGARTEN—PRIMARY)

In order to unify the work of the kindergarten and the primary grades, the department of Kindergarten Education has been reorganized to embrace the field dealing with the education of children from four to eight years of age.

Education 58—Historical and Critical Study of Froebelian Literature and Materials. Readings, discussions, and practical work. points. Miss Burke and Miss Birch.

Tu. and Th. at 3.10, Spring Session.

This course is for students who are unfamiliar with Froebelian theory and practice. A critical study will be made of the writings of Froebel and the educative materials he devised, testing them by the present-day conception of the nature and needs of young children.

Education 101—Play Materials in the Education of Young Children. 2 points. Miss GARRISON.

M. and W. at 4.10, Winter Session.

This course includes the selection and use of play materials such as toys, gymnasium apparatus, building blocks, Froebelian gifts and Montessori materials as substitutes for the traditional materials of the kindergarten and primary school. These materials are selected in relation to the developing child in the light of modern educational theory.

Education 102A—Dramatic Arts, Plays, Games, and Dances of Early Childhood. Lectures, required readings, and practical work. 2 points. Miss Burke.

S., 9–10.50, Spring Session.

A study of games will be made from the genetic standpoint beginning with the early instinctive activities in which they originate, tracing their development from the informal game into the more highly organized and artistic traditional and dance forms.

The course includes a study of the theories of play, the playing of games, and practice in the construction of games for children in kindergarten and primary grades.

Education 101B—Experimental Playground. Lectures, readings, observations, and discussions. 2 points. Miss RANKIN.

Tu. and Th. at 4.10, Winter Session.

This course includes a study of the theories of play with lectures and discussions based on observations of an experimental playground where children between the ages of five and eleven are given opportunity for the free use of materials (wood, tools, sand, clay, apparatus, etc.)

The aim of this course is to show teachers in a practical way how the spontaneous play of children may naturally evolve into co-operative play and social life which is the outgrowth

of a developing social consciousness and of community interests

Education 101C—Beginnings of Music for Young Children. 2 points. Miss Robinson.

Tu. and Th. at 3.10, Winter Session.

This course is designed for those teachers who need a general knowledge of the elements of music for young children with methods of developing the same. Observation of practical work required.

Education 103—Studies and Experiments with Materials Leading to the Fine Arts. Lectures, discussions, and practical work. 2 points. Miss Brown.

S., 9-10.50, Winter Session.

A study will be made of the early manifestations of the art instinct, together with the best methods of guiding these toward more purposeful and artistic ends, preserving the spontaneity of art and play through the use of the experimental method.

Practical work with clay, crayon, paint, paper, etc.

Education 104—Studies and Experiments with Play Materials Leading to the Industrial Arts. Lectures, discussions, and practical work. 2 points. Miss Brown.

M. and W., 4.10-5.30, Spring Session.

A study will be made of the beginnings of the industrial arts with primitive people, and with children, as a means of understanding how to direct the play activities of childhood toward more productive and efficient results, preserving the experimental method of science and the spirit of art and play.

Practical work with clay, paper, cardboard, textile materials and wood.

Education 109-110—Literature in the Primary School. Lectures, required readings, individual research, and reports. 2 points each Session. Miss Moore.

S., 11-12.50.

A study of literature for children will be made in a sufficiently detailed way to give a good basis for the appreciation, selection and presentation of the best and most suitable material for the kindergarten and primary school. Folk and fairy tales, myths, fables, legends, realistic stories, literary wholes, rhymes and poetry will be considered. A careful classification of this material will be made according to its fitness for various ages and purposes.

Education 231x-232x—Experimental Teaching and Practice in Supervision in the Lower Primary School. Experimentation, teaching, supervision, and conference. 2 points each Session. Miss Moore. Hours to be arranged.

This course will usually require two consecutive hours in the forenoon every school day for five consecutive weeks. Students should advise with the instructor before registering for the course.

Open only to students who have had experience in both kindergarten and primary teaching, and intended especially for candidates for the diploma in lower primary supervision.

Education 235–236—Critical Study and Discussion of Observation, and Practice in the Teaching of Young Children. Observation, teaching, and conferences. I point each Session. Miss Brown and Miss Garrison.

F. at 3.10, with special hours assigned for observation, practice teaching, and conferences.

The aim of this course is twofold: first, to provide opportunities for and guidance of observation, together with a critical study of expert teaching; second, to direct practice teaching and guide students in the construction of their own lesson plans.

At least eight weeks of teaching will be required; a longer period may be necessary.

Education 431–432—Practicum. Current Problems in Supervision and the Training of Teachers of Young Children. Lectures, discussion and reports, introductory to independent investigation. 4 points each Session. Professor Hill and Miss Brown.

M., W., and F. at 10.

This course is planned for experienced teachers who are preparing for supervision or the training of teachers of young children. A critical study will be made of the best curricula in representative normal schools with a view to determining the balanced proportions of

theory, observation and practice, and the most educative presentation of the activities and materials to young women preparing for the teaching of young children.

Such practical problems of supervision as salaries, examinations, purchasing and distribution of materials, double session, the planning of hygienic rooms, sanitation, parents' classes and clubs, and teachers' study classes, will be studied, and a comparison made of the methods in representative systems observed and investigated.

Prerequisite or parallel: Education 435–436, and 243.

Education 435-436-Critical Study of Curricula and Experiments in the Education of Young Children. Lectures, required readings, discussions, and investigation. 3 points each Session. Professor HILL and Miss Brown.

M., W., and F. at 2.10.

Section I: For experienced teachers.

Section II: For students without experience in teaching. Observation and investigation or demonstration required.

This course is designed to meet the needs of teachers in the kindergarten-primary field who wish to approach the problem from the experimental rather than the traditional point

of view.

A study will be made of educational possibilities and curricula for the kindergartenprimary period in the light of present-day child study, and a comparison will be made with the conceptions of Froebel, his predecessors and successors. Representative curricula in use in kindergarten today will be critically studied together with those in process of making in experimental classes.

For Summer Session courses see p. 99.

For Unit courses, see p. 38.

For Kindergarten and Lower Primary Diplomas see p. 31.

METHODS IN ELEMENTARY SCHOOLS

Courses in the Supervision of Elementary Schools will be found under Group III on pages 57-59.

Education 109-110—Literature in the Primary School. Lectures. required readings, individual research, and reports. 2 points each Session. Miss Moore.

S., 11-12.50.

A study of literature for children will be made in a sufficiently detailed way to give a good basis for the appreciation, selection and presentation of the best and most suitable material for the kindergarten and primary school. Folk and fairy tales, myths, fables, legends, realistic stories, literary wholes, rhymes and poetry will be considered. A careful classification of this material will be made according to its fitness for various ages and purposes.

Education 143-144—Industrial Arts for the Elementary Grades. 2 points each Session. Miss Patrick.
Section I: M. and W., 2.10-4.
Section II: Tu. and Th., 4.10-6.

Section III: S., 9-12.20.

This course deals with those typical forms of industrial arts work which are practical

in the first six grades of the elementary school.

It aims to secure a method of instruction that will emphasize thinking about concrete objects with relation to industrial uses; the projects include simpler plases of weaving, sewing, clay-working, cookery, wood-, metal-, and paper-working. The application of design to these projects is cared for. The relations of nature-study, geography, history, art, literature and arithmetic to the course are considered.

Education 145-146—Teaching Industrial Arts in Elementary Schools. 2 points each Session. Mrs. Mossman and Professor Bonser. M. and W. at 3.10.

The place of industrial arts in the elementary school; distinction between elementary industrial arts and secondary or vocational study of the industries; materials and processes in the transformation of foods, textiles, metals, wood, and other products which may be used in elementary school practice; the extent to which the development of skill should be expected in the elementary school; the relation of the industrial arts to the fine arts, to

nature-study, geography, arithmetic, and to the other elementary school subjects; organization of courses of study; methods of study and presentation in the industrial arts; supervision of instruction in industrial arts in elementary schools.

Education 107—The Library in the Modern School 2 points. Miss Mary E. Hall.

S., 11–12.50, Winter Session.

For description, see p. 72.

Education 158A—The Teaching of Thrift, Savings, and Investment. 2 points. Mr. Breckenridge.

S., 9-10.50, Spring Session.

For description, see p. 79.

Education 211-212—Theory and Practice of Teaching in Elementary Schools. Lectures, required reading, observation of lessons in the Horace Mann School. 4 points each Session. Mr. Hunt and others. M., Tu., W., Th., and F. at 11.

This course is intended for critic teachers, supervisors, and elementary school teachers. The course is concerned with: (1) the development and formulation of principles of general method; (2) the observation and discussion of lessons taught before the class with special reference to the principles involved. The heads of the several departments present

special reterence to the principles involved. The heads of the several departments present the special methods in teaching English, music, arithmetic, industrial aris, physical education, history and civics, geography, general science, and fine arts.

The course will fall into the following units—Winter Session: (1) General Principles of Teaching as Related to Practice, Mr. Hunt, September 20 to October 17; (2) English Language and Literature, Professor BAKER, October 20 to November 7; (3) Music, Professor Fransworth, November 10 to November 26; (4) Arithmetic, Professor Upton, December 1 to December 19; (5) Physical Education, Professor Wood, January 5 to January 23.

ary 23.

Spring Session: (6) Industrial Arts, Professor Bonser, February 27;
7) History and Civics, Professor Gambrill, March 1 to March 19; (8) Geography, Professor McFarlane, March 22 to April 9; (9) General Science, Professor Bigelow, April 12 to April 30; (10) Fine Arts, Professor Dow, May 3 to May 21.

Education 211x-212x—Experimental Education in the Elementary School. 2 points each Session. Professor McCall.

Hours to be arranged with the instructor.

For description, see p. 51.

Education 211E—The Teaching and Supervision of Arithmetic in Elementary Schools and in the Junior High School. Lectures and discussions. 2 points. Professor UPTON.

S., 9-10.50, Winter Session. For description, see p. 80.

Education 212F—The Teaching of Geography in the Elementary Grades. 2 points. Professor McFarlane.

S., 9-10.50, Spring Session. For description, see p. 75.

Education 213A—Class Management. 2 points. Professor BAGLEY. M. and W. at 5.10, Winter Session.

For description, see p. 57.

Education 213B—Socializing the Elementary School Curriculum. 2 points. Professor Bonser,

M. and W. at 4.10, Winter Session.

This course is intended for those not majoring in elementary supervision who are attempting to revise existing curricula by including problems of most fundamental value in meeting the social and individual needs of present-day life—economic, civic, and recreational. It will include an examination of current experiments in the revision of curricula and the development of principles for constructive procedure.

Education 214A—The Technique of Teaching. 2 points. Professor

M. and W. at 5.10, Spring Session.

For description, see p. 57.

Education 215—Methods of Teaching in Special Classes. 2 points. Miss Farrell.

S., 9–10.50, Winter Session. For description, see p. 48.

Education 215x or 216x-Observation, Experimentation, and Teaching in Connection with Special Classes. 2 points either Session. Miss Farrell, Professor Bonser and Professor L. S. Hollingworth.

For description, see p. 51.

Education 217x-218x—Experimental Supervision and Teaching. 2 points each Session. Miss DAY and Mr. HUNT.

Hours to be arranged.

For teachers of experience opportunities are given for carefully supervised experimental teaching under typical school conditions. Regular practice will also be provided for students who have a limited amount of teaching experience and who are unprepared for experimental work.

The work will usually require two hours in the forenoons of five consecutive weeks, in

addition to the two weekly class periods throughout the Session.

Education 219–220—Problems in Class Teaching in the Elementary School. Lectures, readings, supervised observations, discussions. 2 points each Session. Miss Moore.

W. and F. at 11.

This course will deal with problems of teaching various subjects in the curriculum of the elementary school, together with a consideration of important aims and principles which influence method. Special attention will be given to the teaching of reading, literature, language, composition, and spelling in the first four grades.

Education 411-412-Fundamental Professional Course for Elementary School Principals, Supervisors, and Critic Teachers. points each Session. Class work by Professor Bonser and others. Conferences by Miss Day, Mrs. Mossman, Miss Moore, and Miss Dunn. Class work and conferences, Tu. and Th., 9-10.50, and additional hours

to be arranged.

This course deals with the problems in supervision and curriculum making common to

rins course deals with the problems in supervision and curriculum making common to principals and supervisors in elementary schools and critic teachers in normal or training schools, and is required of all candidates for the Teachers College Diploma in these fields. In the practical work and conferences, applications of principles are made centering about the individual and group needs of the special kinds of positions for which respective students are preparing. Observations, constructive criticism and supervision, experimental teaching, and the formulating and testing of definite units of subject-matter will occupy approximately one-half of the course. For each student the field and conference work will be in the line of his own largest interest.

his own largest interest.

Among the more prominent problems covered by the course are the following:

1. Supervision of instruction—standards for judging the quality of instruction in subject-matter, organization, and technique; observing and analyzing the work of teachers, locating elements of efficiency and inefficiency and determining their cause; improving instruction by constructive criticism and by demonstration of exemplary practice in organization of matter, method, management, and personal relationships with pupils; the place and technique of experimentation in teaching in the elementary school; the use of tests and measurements in improving instruction and in the grading and promotion of pupils; and the use of teachers' meetings in improving instruction.

2. Revision and making of curricula—the formulation of principles of selection and organization of projects and subject-matter, making surveys of usage as one means of evaluating content; organizing and testing illustrative units of courses of study; judging text-books and other sources of materials.

text-books and other sources of materials.

text-books and other sources of materials.

3. Extra-instructional supervision, relationships of supervisors to parents and community enterprises; extra-class activities of pupils and teachers, as clubs and other organizations in school and out; developing professional spirit and morale among teachers; and the responsibility of supervisors and principals for conditions and means of development of health, recreation, and ideals of good citizenship among pupils and teachers.

Education 411A-412A-Criticism and Supervision of Instruction in the Elementary School, with Reference to the Making of a Curriculum. Lectures, required readings, and discussions. 3 points each Session. Professor McMurry.

(Not given 1919–1920.) For description, see p. 58.

Education 411B-412B-Measurement and Experimentation in Elementary Education. 3 points each Session. Professor McCall.

S., 9–10.50.

For description, see p. 51.

Education 411C-412C--Criticism and Supervision of Instruction in the Elementary School, with Special Reference to Methods of Study. Lectures, required readings, and discussions. 3 points each Session. Professor McMurry.

(Not given, 1919-1920.)

For description, see p. 58.

Education 413-414—Problems in Supervision in the Elementary School as Related to Social Reconstruction. 3 points each Session. Miss DAY.

S., 9–10.50.

For description, see p. 59.

Education 417-418—Advanced Experimentation in Supervision and Teaching. 3 points each Session. Miss DAY.

Hours to be arranged.

This course is intended for students desiring to conduct extended laboratory or field researches in elementary instruction or supervision. A study is made: (a) of the technique of experimental teaching, (b) of problems demanding this type of investigation, (c) of the respective functions of teacher and supervisor in this work, and (d) of some of the fundamental principles underlying supervision. Each student will conduct an individual experiment of his own selection and participate in the supervision of others.

In general, students will reserve one hour every morning for the experimentation. Consent of the instructor is required.

sent of the instructor is required.

Prerequisite or parallel: Education 411-412 or its equivalent and Education 411B or its equivalent.

Education 417x-418x—Experimental Teaching, Supervision, and Field Work. 2 points each Session. Miss DAY. Hours to be arranged.

Additional field work in connection with Education 417-418.

Education 458A—Psychology of the Elementary School Subjects. 3 points. Professor THORNDIKE and Dr. GATES.

M., W., and F. at 2.10, Spring Session.

For description, see p. 49.

Education 533-534-Seminar. Elementary Education. Professor BONSER.

Hours to be arranged.

The work of the seminar is the critical investigation of topics in connection with the dissertation. Open only to candidates for the Doctor's degree.

For Summer Session courses, see page 100.

For Unit courses, see page 38.

For Diplomas in Elementary Education, see page 31.

METHODS IN SECONDARY SCHOOLS GENERAL COURSES

Courses in the Administration of Secondary Schools will be found under Group III on pages 54-55.

Education 205A-206A-Problems for Advisers of Women and Girls. 3 points each Session. Professors Stevens, Snedden, and Goodsell, Miss Daniell, and others.

M., W., and F. at 3.10.

For description, see p. 55.

Education 252B—Psychology of Adolescence. 2 points. Professor L. S. Hollingworth.

W. and F. at 10, Spring Session.

For description, see p. 48.

Education 281—Conduct of the Recitation in Secondary Schools. 2 points. Professor STEVENS.

Section I: M. and W. at 2.10, Winter Session.
Section II: M. and W. at 4.10, Winter Session. (For experienced teachers.)

This course is given primarily for students who wish to become classroom teachers in secondary schools. It considers principles of teaching and problems of instruction to be met in a classroom. Such problems as the following will be considered: Teacher control, class control, selection of subject-matter that is purposeful for instruction, its organization into lessons, methods of presentation, analysis of stenographically reported lessons given by experienced teachers, observation of classes at work, etc.

In order to meet the requirements for a Teachers College diploma in a secondary aca-

demic subject, students without experience in teaching must register for Education 281 (Winter Session), or its equivalent Education 282 (Spring Session), and also for Education 283 (if they wish to do their practical work in the Winter Session), or Education 284 (if they

wish to do it in the Spring Session).*

Education 282—Conduct of the Recitation in Secondary Schools. 2 points. Professor STEVENS.

S., 9–10.50, Spring Session.

This course is a repetition of Education 281.

Education 283—Supervised Observation and Teaching. 2 points. Professor Stevens, Miss Sturtevant, and Mr. Morrison.

F. at 4.10. Winter Session.

Supervised observation, practice teaching, or experimental work in city or suburban schools. The course is repeated as Education 284 in the Spring Session.*

Education 284—Supervised Observation and Teaching. 2 points. Professor Stevens, Miss Sturtevant, and Mr. Morrison.

F. at 4.10, Spring Session.

This course is a repetition of Education 283. Students desiring both Education 283 and 284 must secure the consent of their advisers before registration. Students from foreign fields desiring to become familiar with the operations of American secondary schools must register for Education 281 or Education 282 and Education 284.*

Education 283A-284A—Methods of Teaching Secondary Academic Subjects. 2 points each Session. Professors Baker, Gambrill, Lodge, Bagster-Collins, Cooley, Dean, Caldwell, Woodhull, Farnsworth, Dow, Smith, and Wood.
Tu. and Th. at 2.10.

This course is required as a part of the first professional course, Education 481-482, in secondary education and may be elected in whole or in part by those not registered for Education 481-482. Students in 481-482 will be excused from the whole or any part of this course for which they present a satisfactory substitute.

Education 283x-284x—Experimental Teaching in Secondary Schools. 2 points each Session. Professors STEVENS and KELLEY, Miss STURTEVANT, and Mr. Morrison.

Hours to be arranged.

This course affords an opportunity for teachers with some experience in the classroom and training in psychology to work out practically experiments in teaching and to measure their results. Problems of directed learning, memorization, retention, application, improvement by different methods, and the like, may be undertaken.

Education 285—The Improvement of Instruction in Secondary Schools. 2 points. Professor Kelley.

S., 9-10.50, Winter Session.

This course will consider such professional duties of the high school principal as are involved in supervision. Among the topics to be discussed are: The selection of teachers,

^{*}Students expecting to satisfy the requirements of the Department of Education of the State of New York should consult in advance with Professor Stevens.

the improvement of the work of teachers in service, the classification of pupils and the grading of their work, provisions for individual differences, the standards for judging teaching, and supervised study.

Education 286—Curricula and Courses of Study. 2 points. Professor Kelley.

S., 9–10.50, Spring Session.

After a consideration of the principles fundamental for curriculum making in the modern high school, of cosmopolitan or specialized type, this course will require a critical study of the reports recently issued by the National Education Association Commission on the Reorganization of Secondary Education.

Education 288—Organization and Administration of the Junior High School. 2 points. Professor BRIGGS.

M. and W. at 9, Spring Session.

Causes of dissatisfaction with the present organization of schools; definitions and history of the junior high school, approximations in various parts of the country, buildings and equipment, the teaching staff, comparative costs, provisions for individual differences, articulation with the lower and the higher schools, curricula and courses of study, social administration, and results achieved.

Education 288A—Administration Problems of the High School. 2 points. Professor F. W. Johnson.

S., 11-12.50, Spring Session.

This course will consider such practical problems of the high school principal as are involved in administration: The relation of the high school to the state and to other administration. istrative units; control by means of inspection, accrediting, and subsidies; standards for the physical plant and equipment, text-books, teachers, and teaching; relations of the high school to elementary schools and the colleges; the internal organization of the school the selection and assignment of teachers, the program, classification of pupils; the principal's relations with pupils, teachers, parents, and community; compulsory education; marking systems, records, and reports; business administration; publicity.

Education 289—Recreational Leadership in High Schools: A Course in Extra-curricular Activities. 2 points. Professor Fretwell. M. and W. at 10, Winter Session.

This course is intended for those who are to direct the recreational activities of secondary This course is intended for those who are to direct the recreational activities of secondary school pupils. An attempt will be made to work out constructive policies in the recreational phase of pupils' school activities whereby provision may be made for initiative, leadership, co-operation, and intelligent obedience. Six representative secondary schools, public and private, will be studied. Emphasis will be laid on a constructive program for directing such extra-curricular activities as: Social, dramatic, musical, departmental, and literary clubs; school papers and magazines; athletic teams and sports, and gymnasium exercises and games; boys' and girls' leagues; class organizations; such supplementary agencies as Boy Scouts of America, Girl Scouts, Woodcraft League, and Camp Fire Girls. There will be included a plan for a Students' Council or general organization for directing pupil activities in a small and a large high school in a small and a large high school.

Students expecting to take this course are urged to bring with them data regarding extra-curricular activities in their own school. Admission to the course is by permission

of the instructor.

Education 290—Social Organization and Control of the Secondary School. 2 points. Professor Stevens. M. and W. at 10, Spring Session.

After a brief consideration of the social principles upon which the organization of the school rests, this course will analyze extra-classroom activities of the school in the light of these social standards with a view to establishing unity in the practices of the secondary school. The following activities will be thus analyzed: Discipline, self-government, control of lunch room activities, assembly exercises; athletic organizations, study clubs (debating, literary, nature-study, mathematical, etc.), scholarship societies, secret societies, good time clubs, the differentiation of social organizations to meet the needs of boys, of girls, of boys and girls; school festivals, organizations affiliated with civic societies, the school as a social

Education 428—Historical and Comparative Study of the Problems of Secondary Education. 3 points. Dr. KANDEL.

M. and W. at 9, Spring Session.

For description, see p. 57.

Education 458B—Psychology of the Secondary School Subjects. 3 points. Professor Ruger.

M. and W. at 11, Spring Session.

For description, see p. 49.

Education 481-482—Fundamental Professional Course for High School Principals. Lectures, readings, discussions, reports, and field 6 points each Session. Professors Briggs, Johnson, Stevens, Kelley, and Fretwell.

Tu. and Th., 9-11.50.

This first professional course, or its equivalent, is required of all students who are candidates for the Teachers College Diploma as principal or assistant principal of secondary

dates for the Teachers College Diploma as principal or assistant principal of secondary schools, inspector of high schools, or professor of secondary education. In a general way it is designed to consider the more important problems as they are likely to a fise before a principal undertaking his year's work. The following topics will be covered:

(a) Conceptions of the secondary school: Historical and comparative; changes in American life and their influence; the legal status; (b) current tendencies toward extension: The junior high school, the junior college, the evening school, the summer session, continuation and co-operative schools; credit for outside study; (c) influences and controls: Federal and state governments, associations of colleges and preparatory schools, other educational associations, the endowed foundations, colleges and universities; (d) relations to the lower and the higher schools: Methods of stimulating pupils to enter high school; inspection and accrediting standards; methods of entrance to colleges; (e) the physical plant: Buildings, grounds, and equipment; conditions and how they may be improved; standards; the janitor; (f) costs: Analysis and distribution; (g) organizing the school; Classification of pupils, the program; assignment of teachers and rooms; use of special rooms; (h) records: For pupils and supplies; (i) the principal as an administrator: Relations to pupils, teachers, parents, and the general public; effective use of his time; methods of securing publicity for the school; compulsory attendance, absence, and tardiness; health and medical inspection; (j) the principal as a supervisor: The source, social status, and training of teachers; improving teachers in service by criticism, teachers' meetings, health and medical inspection; (j) the principal as a supervisor: The source, social status, and training of teachers; improving teachers in service by criticism, teachers' meetings, study groups, and lectures; the curriculum and courses of study; the selection of text-books; measuring results, marks, and marking systems; teacher-rating, promotion, and discharge; selecting new teachers; (k) the principal as a social leader: Extra-curricular activities—clubs, social and academic, athletics, Boy and Girl Scouts, Junior Chamber of Commerce; discipline; the school as a social center; lessons from the rural schools; (l) the pupils: Social and economic status, preparation, ideals, and ambitions; personal, educational, and vocational guidance; retention in school, acceleration, and retardation, failures; study habits and provisions for directed learning; (m) morale: Developing and maintaining an espirit de corps; (m) survey: Study of surveys made of other high schools; plans for making a self-survey and using the results.

A part of the course will be a series of units (see Education 283A-284A) on the teaching of secondary academic subjects which will include lectures on the teaching of English and

of secondary academic subjects which will include lectures on the teaching of English and social sciences, Latin and modern foreign languages, music and fine arts, physical sciences and biological sciences, home economics and industrial training, mathematics and health.

Education 485-486—A Research Course for High School Principals. Readings, discussions, research, and field work. 6 points each Session. Professors Briggs, Johnson, Kelley, and Fretwell.

W., 1.10-3.

The second professional course is required of all students who are candidates for the The second professional course is required of all students who are candidates for the Doctor's degree in secondary education; it is open to others who have satisfactorily completed the first professional course or its equivalent. This course will offer the elements of statistics necessary for the subsequent study of high school surveys and reports of experimentation in secondary education. Beyond this it will demand an intensive study, with field work, of such topics as: High school surveys; curricula and courses of study; the improvement of teachers in service; education through extra-curricular activities; extensions of the high school—the junior high school, the junior college, evening schools, summer schools, continuation and co-operative schools; the invention and standardization of measures; problems of administration; and legislation affecting secondary education.

Education 587–588—Seminar. Professor Briggs.

Hours to be arranged.

The seminar in secondary education is designed only for candidates for the Doctor's degree who have a major in secondary education.

Education 107. The Library in the Modern School. 2 points. Miss Mary E. Hall.

S., 11-12.50, Winter Session.

For description, see p. 72.

For Summer Session courses, see page 100.

For Unit courses, see page 38.

For Diplomas in Secondary Education, see pages 31-32.

BIOLOGY

Biology 104—Biology in Education and Social Work. 2 points. Professor BIGELOW and Miss STACKPOLE.

M. and W. at 3.10, Spring Session.

A course which presents the leading facts and generalizations of biology—especially of evolution, heredity, embryology, and general physiology—which have important bearings upon education and social work. Several weeks of the course will be devoted to a survey of social hygiene and sex-education.

Education 105-106—Teaching of Nature-Study. 2 points each Session. Professors Bigelow and Broadhurst and Miss Stackpole.

Subject-matter: M. and W., 3.10-5, both Sessions.

Methods: M., W., and F., at 11, April 12-30.

This course is designed for students who expect to become special teachers or directors of nature-study. It deals with the educational bearings, materials, and methods of general nature-study, biological and physical, for elementary schools. Special work may be arranged at Brooklyn Botanic Garden and elsewhere for practical work in school-gardening.

Education 301—Teaching of Biological Sciences in Secondary Schools. Lectures, readings, and practical work. 3 points. Professors BIGELOW and BROADHURST.

M., 3.10-5, Winter Session.

Instructors should be consulted before registration and time for outside work arranged.

The aims, fundamental principles, materials, and methods of high-school biology, including botany, zoology, and human physiology; its relations to nature-study in elementary schools.

Prerequisite: At least 18 points of biological sciences.

Education 302A—The Organization of Science in the High School. 3 points. Professor CALDWELL.

W., 4.10-6, Spring Session. For description, see p. 82.

Education 303-304—Practicum in Teaching Biological Sciences. 4 points each Session. Professors BIGELOW and BROADHURST.

Hours must be arranged with instructors before registration.

Open only to students with extensive experience in teaching science. A study of the larger problems connected with teaching biological sciences in secondary and normal schools. Students with previous preparation in nature-study may give especial attention to nature-study and elementary agriculture for normal or lower schools.

Biology 253-254—Advanced Bacteriology Applied to Practical Arts. 4 points each Session. Professor Broadhurst.

Instructor must be consulted before registration.

For description see announcement of the School of Practical Arts.

For Summer Session courses, see page 102.

For Unit courses, see page 38.

For Diplomas in Biology, see page 31.

For courses in the subject-matter of Biology see the Announcements of the School of Practical Arts, of Barnard College, and of the University Division of Biology. Many biological courses in other parts of the University are open to qualified students of the School of Education.

ENGLISH

Education 107. The Library in the Modern School. 2 points. Miss Mary E. Hall.

S., 11-12.50 Winter Session.

For teachers and officers of supervision. The place of the school library in modern education; standards for school libraries; their aims, resources, and activities.

Education 108—Teaching English to Foreigners. 2 points. DILLER.

S., 9–10.50, Spring Session.

A study in Americanization through language. The course will deal with the more evident language difficulties of foreigners, both children and adults, in our day and evening

evident language dimedities of foreigners, both children and adults, in our day and evening schools, and also of adults in industry.

Selection of subject-matter for English lessons, methods of instruction, criticism of text-books, lesson plans, and class management will be considered, and there will be opportunity for observation, and for teaching foreign classes in the city.

Attention will be given to the problems of teaching English in foreign lands.

Education 109–110—Literature in the Primary School. Lectures, required readings, individual research, and reports. 2 points each Session. Miss Moore.

A study of literature for children will be made in a sufficiently detailed way to give a good basis for the appreciation, selection, and presentation of the best and most suitable material for the kindergarten and primary school. Folk and fairy tales, myths, fables, legends, realistic stories, literary wholes, rhymes, and poetry will be considered. A careful classification of this material will be made according to its fitness for various ages and purposes.

Education 305–306—The Teaching of English in Secondary Schools. Lectures, readings, written work, observation, and practical work. 3 points each Session. Professor BAKER.

Tu. and Th. at 10.

Students without experience in teaching should arrange with the instructor for their practical work at registration time.

This course consists of: (a) Lectures and papers on the choice, interpretation, arrangement, and presentation of material; (b) study of methods of teaching English; (c) practical work in neighboring schools.

Education 306A—The Teaching of English in Normal Schools. 3 points. Professor BAKER.

F., 10-11.50, Spring Session.

A course in preparation for teaching English in normal schools, including (a) critical study of elementary English, and (b) the teaching of English to graduates of high schools.

Education 307-308-Practicum in the Teaching of English in Secondary Schools. 4 points each Session. Professor BAKER.

A course of lectures, readings, and discussions; advanced study of certain material, with special reference to courses of study, the relation of English to other studies in the curriculum, and the historical development of the subject.

Education 308C-Practicum. Professional Problems in the Teaching of English in Secondary Schools. 4 points.

S., 11-12.50, Spring Session.

The course will deal with the application to the teaching of English of current educational theory regarding social aims and values, community needs and resources, classroom procedure, determination of minimum essentials, and measurement of attainment.

Limited to students of approved scholarship and experience.

Education 309—The College Teaching of Composition. 3 points. Professor Baldwin.

(Not given 1919-1920.)

Education 310—The Development of the Theory of Composition. 3 points. Professor Baldwin. (Not given 1919-1920.)

Education 309B-310B—History of the English Language. points each Session. Professor KRAPP.

Tu. and Th. at II.

This course considers the development of English sounds and vocabulary from Old English to modern times. (This course appears in the Announcement of the Division of Modern Languages as English 207–208.)

For a full description of the following courses, see the Announcement of the School of Practical Arts.

English 71-72—Nineteenth Century Writers. Recitations, conferences, and reports. 2 points each Session. Professor BAKER and Miss HILL.

Tu. and Th. at 2.10.

English 76—Typical Forms of Literature. Drama. 2 points. Professor Abbott.

M. and W. at 4.10, Spring Session.

English 77-78—American Literature. Lectures, discussions, reports, and assigned readings. 2 points each Session. Professor Cook. Tu. and Th. at 3.10.

For Summer Session courses, see page 102.

For Unit courses, see page 38.

For Diplomas in English, see page 31.

Attention is also called to related courses in English and Comparative Literature given in other parts of the University and open to students of Teachers College. These courses are described in the Announcement of the University Division of Modern Languages and Literatures, which may be had upon application to the Secretary of Teachers College or the Secretary of the University.

FRENCH AND SPANISH

French 53-54—Educational French. 2 points each Session. Professor Méras.

Tu. and Th. at 10.

This course is designed for students with some knowledge of French who wish to acquire the ability to read the language in the special field of education. Candidates for the degree of Doctor of Philosophy with a major in education should be able to meet the requirements in French upon the completion of this course. Not credited toward a higher degree.

Education 317-318—The Teaching of French in Secondary Schools. Lectures, essays, discussions, reports of observation and practical work. 3 points each Session. Professor Méras.

The purpose of this course is to present the modern point of view in modern language teaching, the fundamental principles underlying the teaching of modern languages, the methods and theories of teaching French and the organization of French instruction in secondary schools. It also deals with the subject-matter and apparatus of French teaching, including courses of study, text-books, grammar, history, literature, use of pictures, charts.

Education 319A-320A-Practicum in French. 4 points each Session. Professor MÉRAS.

(Not given 1919-1920.)

Education 319-320-Cultural Material for the Teaching of French in Secondary Schools. Lectures, discussions, and reports. 3 points each Session. Professor Méras.

W. and F. at 4.10.

This course aims to present the history of French civilization as traced in the literature of France. It purposes to give that understanding of the political, social, and literary growth of the French nation which must form a vital part of the equipment of the modern teacher of French. The course will offer opportunities for advanced work in the language in the form of lectures, discussions, oral and written reports, and explanation of texts.

Education 117A-118A-The Direct Method: A Demonstration Course in French for Beginners. 2 points each Session. Professor MÉRAS.

M., Tu., W., and Th., 9.20-10. Credited for a higher degree or a Teachers College Diploma only if taken with Education 317-318.

A class of pupils in the Horace Mann School will begin their study of French under the instruction of Professor Méras. The work will include observation of lessons taught, reports of observation, lesson-planning, and class discussions. This course will offer opportunities for students to teach in other schools under supervision and criticism.

Education 117B-118B-The Direct Method: A Demonstration Course in Intermediate French. 2 points each Session. Professor MÉRAS.

M., Tu., W., and Th., 11.20-12.

Credited for a higher degree or a Teachers College Diploma only if taken with Education 317-318.

A class of pupils in the Horace Mann School who have studied French for two years will begin their third year under the instruction of Professor Méras. The work will include observation of lessons taught, reports of observation, lesson-planning, and class discussions. This course will offer opportunities for students to teach in other schools under supervision and direction.

Education 129—Phonetics. 3 points. Professor Bagster-Collins. M. and W. at 4.10, Winter Session. For description, see p. 76.

Education 327-328—Methods of Teaching Foreign Languages in Secondary Schools. Lectures, discussions, reports, and practical work. 3 points each Session. Professor BAGSTER-COLLINS.

This is a course for all those interested in the teaching of foreign languages. The discussion of the position of modern languages in American education as the outcome of the war will be followed by a detailed analysis of the principles and practice that are applicable to all foreign language study. Teachers of English to foreigners and students interested in any particular language will be given special problems for study.

Education 330—Problems in Modern Language Method. 4 points Professor Bagster-Collins.

M. and W. at 4.10, Spring Session.

This course aims to acquaint teachers with the problems involved in the study of foreign language text-books and to furnish sound criteria for selecting and organizing text-book material.

Representative grammars, composition books, and annotated reading texts will be used as a basis for the critical study of such points as vocabulary, grammatical arrangement, exercises, etc

Prerequisite or parallel: Education 327-328.

Note. For hours and description of preliminary courses in French and Spanish, see Announcement of the School of Practical Arts.

For Summer Session courses, see page 103.

For Unit courses, see page 38.

For Diploma in French, see page 31.

Attention is also called to related courses in French and Romance Philology given in other parts of the University and open to students of Teachers College. These courses are described in the Announcement of the University Division of Modern Languages and Literatures, which may be had upon application.

GEOGRAPHY

Geography 105-106-Industrial and Commercial Geography. Lectures and laboratory work. 2 points each Session. Professor McFAR-LANE and Mr. LEHNERTS.

M. and W. at 4.10.

The first part of the course will deal with the distribution of raw materials, the laws of commerce, and the world highways. The second part will consist of a detailed study of the leading commercial nations of the world, with especial emphasis upon the commerce of the United States. Smith's Industrial and Commercial Geography and assigned readings.

Education 212F—Teaching of Geography in the Elementary Grades. 2 points. Professor McFarlane.

S., 9-10.50, Spring Session.

The course includes a study of the principles underlying the selection and organization of the subject-matter of school geography and a consideration of courses of study in geography. Attention will be given to the readjustment of emphasis in this subject as shown to be necessary by the great war; and the nature and use of maps, graphs, diagrams, and other illustrative material of geography will be considered.

Education 321-322—The Teaching of Geography in Secondary Schools. Lectures, discussions, and laboratory work. 3 points each Session. Professor McFarlane.

M: and W. at 1.10.

Practical work must be arranged with the instructor before registration.

The first part of the course deals with the subject-matter usually included in the geography courses of secondary schools. The second part of the course takes up the problems of teaching geography in secondary schools.

Education 321A-322A—The Teaching of Physiography in High Schools. Lectures and laboratory work. 3 points each Session. Mr.

S., 9-10.50, and laboratory hours to be arranged with the instructor.

A systematic development of the principles of physiography. The subject-matter will be used in presenting appropriate methods of teaching the subject in secondary schools. The laboratory work may be replaced by field trips during the autumn and spring.

Education 323–324—Regional Geography. Lectures and laboratory work. 3 points each Session. Mr. LEHNERTS.

Tu. and Th. at 4.10, and laboratory hours to be arranged with the instructor.

The physical conditions and features on the globe as a basis for understanding the adjustment of people to the land. Brief review of the systematic side of the subject, movements of the atmosphere and of the ocean, and the origin of the surface features of the earth. The climatic regions and physical features of the continents are studied with a view to explaining the distribution of population, the boundaries of nations, the location of cities, and the physical control of commerce and industries.

The course provides a fundamental basis for those doing work in geography, history, and commercial and industrial subjects.

commercial and industrial subjects.

Education 302A—The Organization of Science in the High School. 3 points. Professor CALDWELL.

W., 4.10–6, Spring Session. For description, see p. 82.

For Summer Session courses, see page 102.

For Unit courses, see page 38.

For Diplomas in Geography, see page 31.

Attention is also called to related courses in Geology given in other parts of the University and open to students of Teachers College. These courses are described in the Announcement of the University Division of Geology, Geography, and Mineralogy, which may be had on application to the Secretary of Teachers College or the Secretary of the University.

GERMAN

German 53-54-Educational German. 2 points each Session. Professor Bagster-Collins.

Hours to be arranged.

This is an introductory course intended for students with some knowledge of German who wish to acquire the ability to read the language in the special field of education. The Spring Session may be taken separately by students whose previous knowledge of the language is satisfactory to the instructor. Candidates for the degree of Doctor of Philosophy, having education as their major subject, should be able to meet the requirements in German for the degree upon the completion of this course.

Not credited toward a higher degree.

German 144—Modern German Syntax. Lectures, discussions, and reports. 2 points. Professor Bagster-Collins.

(Not given 1919-1920.)

This course is planned to give a detailed account of a number of the more important topics of modern German syntax. They are treated historically in so far as is necessary for a better understanding of usage of the present day. Representative texts used in high schools and colleges furnish the material for critical study.

Education 125-126-German in Secondary Schools, Study of Material. Lectures, recitations, and papers. 3 points each Session. Professor Bagster-Collins.

(Not given 1919-1920.)

This is a subject-matter course for prospective teachers of German. It aims to organize the various kinds of knowledge necessary for teaching German in secondary schools. Accidence and syntax, composition, classroom conversation, and typical texts used in secondary work form the chief topics for study.

Education 129—Phonetics. Lectures and recitations. Professor Bagster-Collins.

M. and W. at 4.10, Winter Session.

This is a general course dealing with the science of speech sounds. The aim will be to show the application of phonetics in the teaching of the mother tongue and foreign languages. Although a knowledge of at least French and German is desirable, the analysis of the speech sounds will be based upon those found in English.

Education 327-328—Methods of Teaching Foreign Languages in Secondary Schools. Lectures, discussions, reports, and practical work. 3 points each Session. Professor Bagster-Collins.

This is a course for all those interested in the teaching of foreign languages. The discussion of the position of modern languages in American education as the outcome of the war will be followed by a detailed analysis of the principles and practice that are applicable to all foreign language study. Teachers of English to foreigners and students interested in any particular language will be given special problems for study.

Education 330—Problems in Modern Language Method. points. Professor Bagster-Collins.

M. and W. at 4.10, Spring Session.

This course aims to acquaint teachers with the problems involved in the study of foreign language text-books and to furnish sound criteria for selecting and organizing text-book material.

Representative grammars, composition books, and annotated reading texts will be used as a basis for the critical study of such points as vocabulary, grammatical arrangement, exercises, etc.

Prerequisite or parallel: Education 327-328.

Note. For preliminary courses in German, see Announcement of School of Practical Arts.

For Summer Session courses, see page 103.

For Unit courses, see page 38.

For Diplomas in German, see page 31.

Attention is also called to related courses in German given in other parts of the University and open to students of Teachers College. These courses are described in the Announcement of the University Division of Modern Languages and Literatures, which may be had upon application to the Secretary of Teachers College or the Secretary of the University.

HISTORY

Education 331—Teaching History in Secondary Schools. 3 points. Professor Gambrill.

Tu. and Th. at 4.10, Winter Session.

This course is devoted to a study of the general problems of history teaching with special reference to the high school (both 4 years and 6 years). Among the problems to be considered are the nature of history, its relation to other subjects, and its place in education; selection and organization of subject-matter and its arrangement in courses of study; effective presentation of materials of instruction, helping the pupil to learn how to study, illustrative materials, and "making the past real"; judging text-books, their use and abuse, collateral reading; testing results; the "socializing" tendency; revelations and demands of the present world crisis. Foreign as well as American experience will be considered.

Education 332—The History of School Instruction in History. 3 points. Professor Johnson.

(Not given 1919-1920.)

The aim of this course is to explain the development of present conditions of history teaching in Europe and in the United States and to furnish standards by which to judge progress in current discussions.

Education 332A—The Teaching of History in Normal Schools. 3 points. Professor Johnson.

(Not given 1919-1920.)

Three aspects of the problem are considered: (1) The organization and supervision of history in practice or observation schools; (2) the normal school course in methods of teaching history; and (3) the course in history, and the methods of instruction, suitable for the preparation of teachers of history.

Education 331 and 332 are recommended as an introduction to this course.

Education 332B—Industrial and Social Aspects of History. 3 points. Professor GAMBRILL.

Tu. and Th. at 4.10, Spring Session.

This course is intended for all teachers of history and of other social subjects and for supervisory officials interested in revising the course of study for more adequate treatment of current problems. It considers the value of the social and industrial factors, as compared with the more familiar political, diplomatic, and military, in understanding the development of the modern world. To provide a concrete basis for the discussions, the class will study the most important general subject in the field—the transformation from the old regime of the eighteenth century to the age of machinery, power, and applied science, with the accompanying economic and social revolutions and emergence of the great problems of today.

Education 333-334—Practicum. The Literature of American History. 4 points each Session. Professor JOHNSON.

(Not given 1919-1920.)

A general survey of the field with practical exercises in bibliography, criticism, and construction. Special attention is given to materials and problems suitable for use in school.

History 345-346—Social and Industrial History of the United States. 3 points each Session. Professor GAMBRILL. Tu. and Th. at 3.10.

The purpose of the course is to study the origin and development of current social and industrial conditions in the United States, with special reference to changing problems in education and social reform. Among the topics studied are the beginnings of America as a part of the overseas expansion of Europe and the consequent Commercial Revolution; development of an American people, their distinctive traits and ideals; agricultural progress, age of machinery, power, and applied science, revolutionizing modern society; rise and inter-relations of great industries and transportation systems; capitalism and growth of "big business"; labor unions, socialism, and anarchism; changing status of women; modern democracy, its progress and phases in the United States.

Education 212C—The Teaching of Citizenship in Secondary Schools. 2 points. Mr. HATCH.
M. and W. at 4.10, Spring Session.

This course treats of the literature and practice of civic instruction and of the materials and methods which should be at the command of the teacher.

Education 212D—Illustrative Lessons in Citizenship. 2 points. Mr. HATCH.

M., W., and F. at 10, Spring Session, and conference hour to be arranged. The class will be a junior class in the Horace Mann High School. The lessons will illustrate the materials and methods of instruction set forth in Education 212C.

Note. For preliminary courses in History, see Announcement of School of Practical Arts.

For Summer Session courses, see page 103.

For Unit courses, see page 38.

For Diplomas in History, see page 31.

Attention is also called to related courses in History and Sociology given in other parts of the University and open to students of Teachers College. These courses are described in the Announcement of the University Division of History, Economics, and Public Law, which may be had on application to the Secretary of Teachers College or the Secretary of the University.

LATIN

Education 151–152—The Teaching of Latin in Secondary Schools. Lectures, reports, and practical work. 2 points each Session. Professors LODGE and KNAPP.

M. and W. at 3.10, Winter Session, and 4.10, Spring Session.

The course is divided as follows: (a) Systematic study of the Latin syntax, exercises in translation, enunciation, and use of Latin in the classroom; (b) lectures on the principles of Latin pronunciation, prosody, and other matters connected with the teaching of Latin, such as the selection and arrangement of materials in a course of study and the like.

Education 351-352—Practicum in Latin—Cæsar and Vergil. Lectures, interpretations, and reports. 4 points each Session. LODGE and McCrea.

Tu. and Th. at 9.

A critical and exegetical study of selected portions of the *De Bello Gallico* during the first half-year, and of the *Encid* during the second. The course is conducted, in a general way, after the manner of a seminar. Special exercises in translation and interpretation are required of the students, and a thorough study of all the helps to the teaching of the authors is insisted upon.

Education 521-522-Problems in Latin Syntax. Lectures and reports. 4 points each Session. Professor Lodge.

Hours to be arranged.

A registration of four students is required.

The development of syntactical theory is traced from the views of the Greek philosophers and grammarians, through the Latin grammarians and the scholars of the Renaissance, to the most recent discussions. Then the results of comparative philology and historical syntax are employed to show, as far as possible, the fundamental conceptions of syntactical usage; and an attempt is made to organize and explain the phenomena of the language as they appear in the literary monuments. Open only to candidates for the Doctor's degree with a major in education.

Prerequisite: Education 351-352.

Latin 211-212—Latin Vocabulary and Conversation. 2 points each Session. Professor Lodge.

Tu. and Th. at 10.

The work of the Winter Session is devoted to a systematic study of the Latin vocabulary, the formation of words, their relative importance for the teaching as well as for the use of

the formation of words, their relative importance for the teaching as well as for the use of English. Certain selections from Latin prose and poetry will be read to demonstrate how pupils should be led to deduce the meaning of the word from its formation and the context, and suggestions will be given as to methods of teaching vocabulary in high schools.

The work of the Spring Session is intended to provide practice in speaking Latin with a view primarily to the use of Latin in oral teaching. During part of the time selections from Latin literature, mainly Plautus, Terence, and Seneca's plays, will be read and discussed; at other times definite topics will be assigned which the class will be expected to treat. As a rule the language used in discussion and translation will be Latin.

a rule the language used in discussion and translation will be Latin.

For Summer Session courses, see page 103.

For Unit courses, see page 38.

For Diplomas in Latin, see page 32.

Attention is also called to related courses in Latin given in other parts of the University and open to students of Teachers College. These courses are described in the Announcement of the University Division of Ancient and Oriental Languages, which may be had on application to the Secretary of Teachers College or the Secretary of the University.

MATHEMATICS

Mathematics 31-32-Industrial Mathematics. 2 points each Session. Mr. Breckenridge.

S., 11-12.50.

For description, see Announcement of the School of Practical Arts. This is an undergraduate course. Graduate students desiring work in this field should elect Education 159-160.

Education 157—Current Questions in the Teaching of Secondary Mathematics. 2 points. Professors Smith and Upton, and Mr. Breck-ENRIDGE.

(Not given 1919-1920.)

Education 158A-The Teaching of Thrift, Savings, and Investment. 2 points. Mr. Breckenridge.

S., 9-10.50, Spring Session.

This course is intended for teachers in elementary, secondary, or vocational schools. It is also intended for both men and women who need a practical course in personal savings

and investments

The course will include a study of the methods of presenting thrift in the schools in connection with the various school subjects, especially in the classes in arithmetic and in high school mathematics; a study of the United States Government campaign for War Savings and Thrift, the organization of War Savings Clubs, the several issues of Liberty Bonds; and Thrift, the organization of War Savings Clubs, the several issues of Liberty Bonds; the various agencies for promoting thrift through saving money such as the savings bank, postal savings, building and loan associations, co-operative banks; the methods of investing money such as real estate, stocks, bonds, with a study of the relative desirability, safety and yield of the several types of investment securities; thrift through economical buying by taking advantage of various forms of cash and trade discounts; thrift in borrowing money so as to avoid excessive interest rates, including borrowing from banks, loan societies, the Morris plan; avoidance of loan sharks; thrift through provision for emergencies, and for old age by means of life insurance, endowment insurance, health and accident insurance, annuities, and life incomes.

No special preparation in mathematics is needed on the part of those who take the course. For undergraduates this course may count as mathematics or as science in the

course. For undergraduates this course may count as mathematics or as science in the satisfaction of the requirement for the B.S. degree.

Education 159-160—The Teaching of Applied Mathematics. Lectures, discussions, and practical work. 2 points each Session. Mr. Breckenridge.

S., 11-12.50.

Practical work must be arranged with the instructor at registration.

This course is so arranged that either half may be taken independently of the other. Inis course is so arranged that either half may be taken independently of the other. For teachers of mathematics or mechanic arts in technical, trade, or academic schools. The course includes the use of the transit and level; theory and field practice in problems in surveying that can be used in secondary schools; the use of the slide rule, planimeter, integraph, and sextant; a study of graphs as practical aids; the theory of approximation and errors; and the use of the micrometer and vernier. Consideration is given to the teaching of practical problems selected according to the needs of the students from such subjects as the following: rough lumber, general construction, forestry methods in heights of trees, house building, pulleys, belts, and speeds: pattern making and foundry work subjects as the following: rough lumber, general construction, forestry methods in neights of trees, house building, pulleys, belts, and speeds; pattern making and foundry work, cutting speed and feed, tapers, thread proportions, gearing for screw cutting, indexing, gear proportions and spirals, automobile work, agriculture, and such war problems as range finding. A serious study is made of genuine applied problems, of the history of the teaching of mathematics in industrial schools both in America and in Europe, and of the present organizations of courses and methods of teaching applied mathematics in industrial and technical schools of secondary grade.

Education 211E—The Teaching and Supervision of Arithmetic in Elementary Schools and in the Junior High School. 2 points. Professor UPTON.

S., 9–10.50, Winter Session.

This course treats of the modern methods of teaching arithmetic in the eight grades of the elementary school. Such topics as the following will be treated: the development of addition and multiplication tables; the methods of treating subtraction; habit formation in its relation to the learning of the fundamental operations; drill; fractions and decition in its relation to the learning of the fundamental operations; drill; fractions and decimals; mensuration; percentage and interest; the use of the equation; bank, trade, and commercial discounts; the work of the modern bank; the clearing house; modern commercial paper, its forms and its uses; stocks, bonds, and other investment securities; the stock exchange; domestic and foreign exchange; fire, accident, and health insurance; modern life insurance and the standard forms of policies; annuities and other applications of arithmetic in modern business life. The aim throughout is to show hot or leate arithmetic to the child's everyday life and to his future needs. Attention will also be given to modern experiments in the teaching of arithmetic and to the measurement of progress in this subject by the tests of Courtis, Stone, Woody, and others.

The course aims to take up the various problems confronting the supervisor of arithmetic, including the course of study and the selection of appropriate subject-matter for it.

metic, including the course of study and the selection of appropriate subject-matter for it.

Curricula in mathematics for the junior high school will also be considered.

Education 357—The Teaching of Geometry in Secondary Schools. 3 points. Professor UPTON.

Tu. and Th. at 4.10, Winter Session.

This course aims to present the best modern practice in America and abroad in the teaching of geometry. It includes such topics as the introduction to geometry, geometric drawing, applications of geometry in life about us, the foundations of geometry, the nature and types of geometric reasoning, and its relations to reasoning in other fields, systematic methods of attacking exercises, typical methods of presenting geometry, the current tendencies in subject-matter, the fusion of algebra and geometry, recent experiments to linprove the teaching of geometry, modern tests for measuring the results of geometric study, brove the teaching of geometry, modern tests for measuring the results of geometric study, the use of models and measuring instruments, the teaching of trigonometry, the high school mathematics library, and the mathematics club. The adaptation of geometric subject-matter to the needs of the junior high school will also be discussed.

In connection with the work in methods there will be opportunity for observation of actual teaching in high school geometry, especially in classes where the newer methods

are being tried.

Education 358—The Teaching of Algebra in Secondary Schools. 3 points. Mr. Breckenridge.

Tu. and Th. at 4.10, Spring Session.

It is the purpose of this course to present the best modern practice in America and abroad in the teaching of algebra. The course will include a discussion of the present problems relating to the position of algebra in the curriculum, the reorganization of its subject-matter, the sequence of topics, the aims in teaching, the reasonable chances of improving the curriculum in the immediate future, a consideration of the investigations that have been conducted on the teaching of algebra, and the modern tests for measuring progress and attainments in this subject. Attention will be given to the presentation of twicel methods of recitation and to the applications of algebra in various lines. typical methods of recitation and to the applications of algebra in various lines.

Education 359-360—Practicum in the Teaching of Mathematics. 4 points each Session. Professor SMITH.

M. and W. at 4.10.

Discussion of special problems of mathematical education, such as the theories of teaching the science, the development and present status of the methods of attacking problems considered in the light of modern mathematics, the various methods of treating certain topics in the secondary school and in the college. The work is largely individual, after the manner of a seminar. Special attention will be given to a study of the junior high school and the senior high school, including the question of required and elective mathematics.

Education 557-558—Seminar in the Teaching of Mathematics. Professor Smith.

Hours to be arranged.

Prerequisite: Education 359-360.

Mathematics 351-352—History of Mathematics. Lectures and collateral reading. 3 points each Session. Professor Smith.

M. and W. at 3.10.

This course is designed to give a general view of the historical development of the elementary branches of mathematics—arithmetic, algebra, synthetic and analytic geometry, trigonometry, and the differential and integral calculus—from the earliest times to the present. The rise and growth of the higher mathematics, chiefly in the nineteenth century, are also considered briefly. The course is recommended especially to those who expect to teach mathematics, showing, as it does, the science in evolution and tracing the causes that have led to its development or stagnation in various epochs. This course is so arranged that either half may be taken. Students wishing to do more intensive work in the history of mathematics should register for Mathematics 353–354 instead of 351–352.

Mathematics 353-354—Practicum in the History of Mathematics. Research and discussions. 4 points each Session. Professor Smith. M. and W. at 3.10, Tu. and Th. at 10.

This is the course in Mathematics 351-352, together with one extra hour on both Tuesday and Thursday. It is a reaserch course open only to those who desire to study exhaustively the history of one or more special topics. The work will consist chiefly of the critical study of early treatises which are not accessible in English, and therefore should not be undertaken without a fair knowledge of two foreign languages. This course is so arranged that either half may be taken.

Mathematics 553-554—Seminar in the History of Mathematics. Research and discussions. 4 points each Session. Professor Smith. Hours to be arranged.

This course is open only to those who have completed Mathematics 353-354.

For Summer Session courses, see page 103.

For Unit courses, see page 38.

For Diplomas in Mathematics, see page 32.

Attention is also called to related courses in Mathematics, Physics, and Astronomy given in other parts of the University and open to students of Teachers College. These courses are described in the Announcement of the University Division of Mathematical and Physical Science. which may be had upon application to the Secretary of Teachers College.

PHYSICAL SCIENCE

Education 197-198-The Teaching of Physical Science in Secondary Schools. Chemistry and Physics. Lectures and practical work. 2 points each Session. Professor WOODHULL and Mr. Good.
Tu. and Th. at 4.10. Practical work arranged with instructor at registra-

This course covers the selection, arrangement, and treatment of subject-matter suitable for secondary schools, and a study of equipment and management of laboratories.

Education 197 or 198, combined with Education 197A or 198A, may each count as one

advanced course in satisfaction of the requirements for the degree of Master of Arts. See page 26.

Education 197A-198A—The Teaching of Laboratory Physics in Secondary Schools. Laboratory work, conferences, and reports. 2 points each Session. Mr. Good and assistants. S., II-12.50.

A series of laboratory projects for teachers of practical physics. This work will include exercises in construction, operation, and study of types of practical apparatus and commercial appliances available for use in the average high school. The formal and practical method of laboratory procedure will be considered and criticised, especially in regard to school organization and the ends to be accomplished by the science teacher in the modern public school. Attention will also be given to criticisms by specialists in general educational theory, by supervisors and administrators of school work, and by the general public. The mechanical, electrical, and heating equipment of the Teachers College buildings will be open to the class for observation and study.

Education 197B—The Teaching of General Science. Lectures, demonstrations, observation of teaching, and discussions. 2 points. Professors Woodhull and Bigelow, Mr. Good and Mr. Meister.

S., 9-10.50, Winter Session.

The course will give a survey of the materials and methods applicable to school conditions. A prominent feature of the course will be a consideration of the project method in science teaching. It will include a consideration of the educational principles which should operate in a modern science teaching program.

Education 198B—The Teaching of General Science. 2 points. S., 9-10.50, Spring Session.

This is a repetition of Education 197B.

Education 302A—The Organization of Science in the High School. 3 points. Professor CALDWELL.

W., 4.10-6, Spring Session.

This course considers: the aims of science teaching; recent investigations regarding science teaching; tendencies toward unification of a progressive series of science courses; the general science movement—reasons for it; types of courses, relation to other courses, work of classroom, laboratory, field, home and the related industries, including presentation of type topics; brief survey of courses in biology, agriculture, domestic science, physics and chemistry in their relation to the science program as a whole.

Education 395-396—The History of Physical Science. Lectures and collateral reading. 3 points each Session. Professor WOODHULL. Th., 10-11.50.

Education 397-398—Practicum in Physical Science. 4 points each Session. Professor Woodhull.

S., 11-12.50.

This course is devoted to the investigation of problems connected with the teaching of physical science in secondary and in normal schools.

Education 597-598—Seminar in the History and Teaching of Physical Science. Professor Woodhull.

Hours to be arranged.

For Summer Session courses, see page 104.

For Unit courses, see page 38.

For Diplomas in Physical Science, see page 32.

Attention is also called to courses in Physiological and Household Chemistry given in the School of Practical Arts and to courses in Astronomy, Chemistry, and Physics open to students of the School of Education in other parts of the University. Detailed information concerning such courses for 1919–20 is given in the Announcement of the School of Practical Arts and in the Announcements of the University Divisions of Mathematical and Physical Science and of Chemistry, which may be had from the Secretary of Teachers College.

V—VOCATIONAL EDUCATION

Courses in this group are classified as follows: VOCATIONAL EDUCATION RURAL EDUCATION RELIGIOUS EDUCATION SCOUTING AND RECREATIONAL LEADERSHIP.

VOCATIONAL EDUCATION

Education 295-296—Vocational Education. Lectures, readings, and reports. 2 points each Session. Professors SNEDDEN and DEAN.

Tu., 7.30-9.20.

This is an elective course for persons not specializing in the direction or supervision of vocational education. It includes: An analysis of the conditions underlying the social demand for vocational education; studies of current experiments and proposals for improving the scope and quality of vocational education; educational, industrial, and social forces behind the movement; terminology; types of schools; distinctions between prevocational and vocational education; trade unions and industrial education; vocational guidance; technical high schools; vocational education for girls; industrial work in rural communities; department store employment; surveys of occupations and educational needs of workers; state and national legislation; unit and group courses, methods of organization, location, equipment, reports; supervision and approval; organization in small communities.

Education 297-298-Vocational Guidance. Lectures, readings, and reports. 2 points each Session. Mr. Weaver, Professors Snedden, Dean, and Bonser.

S., 11-12.50.

This course is devoted to a study of the methods, problems, and administration of vocational guidance. Among the problems those of prominence will include the place and possibilities of vocational guidance in regular school work, vocational guidance aspects of the junior high school work and organization, the preparation and work of the vocational counselor, means of discovering vocational guidance, and the organization and various auxiliary institutions for vocational guidance, and the organization and administration of vocational guidance departments and bureaus. The work is developed with reference to the needs of superintendents and principals, teachers, and social workers interested in the problem, and students desiring to acquaint themselves with the general field and its problem. field and its problem.

Students interested in the technique of vocational guidance tests should take Educa-

tion 456A—Mental and Vocational Tests and Treatment of Results, as a parallel course.

Education 456A—Mental and Vocational Tests and Treatment of Results. 3 points. Professor Ruger. Tu. and Th., 4.10-6, Spring Session.

For description, see p. 53.

Education 495-496—Supervision and Direction of Vocational Education. 6 points each Session. Professor Dean, assisted by Professor SNEDDEN.

Tu. and Th., 9-11.50.

This is a required first professional course for all persons seeking to qualify as directors This is a required first professional course for all persons seeking to quality as uneccous of vocational schools or as agents, supervisors or assistant superindents promoting vocational education of less than college grade in agricultural, commercial, homemaking and industrial schools and who are candidates for the Teachers College Diploma in these fields. Principal topics include:

(a) The social significance of contemporary movements for the extension of vocational contemporary in the extension of vocational contemporary in the contempor

tional education in schools; the relation of vocational to general education, vocational guidance, and pre-vocational education; special problems of aim in agricultural, comercial, homemaking and industrial education; (b) local organization of vocational schools; joint administration with schools of general education; schools under independent boards; advisory committees; management of productive works for training; part time arrangements; (c) state and national co-operation; state aid and methods of accompanying supervision; national aid and oversight; problems of the Smith-Hughes act; training

of teachers for agricultural, commercial, homemaking and industrial schools; (d) methods of industrial education; minimum essentials for basic education for specific occupations; methods of trade analysis; trade tests; correlating vocational school training with apprenticeship; the short-unit course; the project method; (e) special methods of agricultural education; analysis of the agricultural vocations; the home project; the agricultural technical school; courses in major lines of production; general or informational courses in agriculture; (f) special methods of commercial education; analysis of the commercial vocation; part time and co-operative arrangements; special problems for counter salesmanship; special problems for field salesmanship; technical extension courses; (g) special methods of homemaking education; analysis of the homemaking vocations, the desirable scope of home economics; technical instruction; the home project.

Education 497-498-Organization and Supervision of Vocational Education. 6 points each Session. Professor DEAN.

Hours to be arranged.

This is a required second professional course for directors and supervisors of vocational education who are candidates for the Doctor's degree. It may be taken by experienced leaders who can establish their fitness for advanced work. About one-third of the course will consist of practicum work on general problems, and the remaining two thirds of semi-nar and field work and research on courses of study, tests, and standards in one or more

nar and field work and research on courses of study, tests, and standards in one or more of the four fields of secondary vocational education.

The following are principal divisions: (a) Special contemporary problems of administration, organization, and supervision; national aid; relations to industry; training of teachers; (b) preparation of basic and technical courses for selected types of industrial schools; development of tests of vocational competency, examination of special methods of instruction and training for selected industries; (c) courses of study, tests, and problems of method in agricultural education; (d) courses of study, vocational tests, and problems of method in home making education; (f) field work in agricultural, commercial, homemaking, and industrial education; includes survey, visiting, co-operative teaching.

For Summer Session courses, see page 104.

For Unit courses, see page 38.

For Teachers College Diplomas, see pages 31-32.

RURAL EDUCATION

Education 140—Household Arts in Rural Communities. 2 points. Professor Spohr.

W. at II, F. at I.10, Spring Session.

A course for those interested in the problems that confront women living in rural communities. Topics: The domestic, economic, social, and educational needs of farm women; provision for meeting these needs; Federal, state, and county organization; the home demonstration agent and her work; the relation of extension work to the rural school; household arts in the rural school. Consideration will be given to problems of organization and administration, and choice of projects and subject-matter.

Education 140x-Field Work in Household Arts for Rural Communities. 2 points. Professor Spohr.

Hours to be arranged, Spring Session.

Conferences and practical exercises supplementary to Education 140, to afford field training for rural extension teachers of household arts.

Education 202B—Rural School Administration and the Rural High School. 2 points. Professors CARNEY and BRIGGS. Hours to be arranged, Spring Session.

The first part of this course will be devoted to the problems of rural school administration including a discussion of federal aid and a national program for rural schools; state administration of rural schools; the county unit; consolidation; and the unit and

function of local control.

Toward the end of the course some of the outstanding problems in the administration of rural high schools will be considered including: definition and types; state administration and subsidy; local administration and supervision; special departments; rural adaptations of the curriculum; the junior high school in rural localities; consolidation, and federal aid and the effect of the Smith-Hughes act upon rural secondary education.

Miss Carnery will have the general direction of this course, but the class will join Pro-

fessor Briggs' course Education 481-482 for several lectures.

Education 271-272—Rural Education. 2 points each Session. Professor Carney and Miss Dunn.

M. and W. at 9.

This is a general survey course, designed for students who wish an introduction to the whole field of rural education as a background for specialization in other fields. The following are the main topics: The present situation in rural education in the United States; the prevalence, characteristics, and needs of the one-teacher school, and hopeful measures for its improvement; the progress and prospects of consolidation; the course of study in the elementary rural school and in the consolidated high school; the status of rural supervision and administration and the increasing emphasis on professional supervision; means for providing an adequate supply of trained teachers and supervisors for rural schools; extension work and adult education, past and present, and the share of the local community, the state, and the federal government in rural education.

This course may be elected for either or both sessions.

Education 273-274—Rural Sociology and Economics. Lectures, discussions, and reports. 2 points each Session. Dr. Wilson. W. and F. at 10.

A descriptive course concerning the social and economic progress experienced by Eu-A descriptive course concerning the social and economic progress experienced by European and American country populations and the educational advances that have attended social reforms. The course covers the half-century before the great war and presents the educational material in rural life growing out of the war and reconstruction. It is intended especially for beginners in the study of rural social institutions, the community, school, church, grange, co-operative society, with study of particular problems of poverty, labor, income, health, recreation, and morality. The purpose of the course is to train the student to observe, to weigh social values and needs, and to make programs for social work through the rural school, in public health, in home economics, and agricultural demonstration work. cultural demonstration work.

Education 275–276—The Preparation of Rural Teachers. 2 points each Session. Professor Carney.

Tu. and Th. at 9.

The course consists of the lectures, readings, and discussions covering the rural phases of Education 475–476, and is open to students in related fields who wish to make but a limited study of rural-teacher preparation in the United States. In general the Winter Session will be devoted to the preparation of rural teachers in high schools and the Spring Session to rural-teacher preparation in state normal schools. The course may be elected for either or both sessions.

Education 277-278—Rural Supervision. 2 points each Session. Miss Dunn.

Tu. and Th. at 11.

This course consists of the lectures and readings on rural supervision which form a part of Education 477-478, and is open to students in related courses who wish some insight into the problems of rural supervision.

Education 473-474—Practicum. Rural Social Surveys. 4 points each Session. Dr. WILSON.

F., 3.10-5.

A descriptive and research course in country life conditions and the methods of inves-A descriptive and research course in country life conditions and the methods of investigation which have developed in rural research work. The course centers in the analysis of community and county organization and in the study of the processes of life and of social control in the rural residence area and in the rural administration area. The history, profress, types of mind, and objectives of rural life are studied with the purpose of preparing the student for social service in the country as teacher, supervisor, county agent, minister, or public health nurse. Students will report on surveys made and will themselves visit country communities for first-hand investigation. The preparation of schedules for particular surveys, the review of earlier research methods, and the presenting to the class of informal and formal papers make up the greater part of the work. The changes in rural organization due to war and reconstruction will be studied with a view to preparation of leaders in vocational rehabilitation and community organization.

Education 475-476—The Preparation of Rural Teachers. 6 points each Session. Professors Carney and Bagley.

Tu. and Th., 9-11.50.

This is the first professional course for persons engaged in the preparation of rural teachers, including state supervisors of normal training high schools and directors of rural education in normal schools, high schools, and county training classes; and is required of all students who are candidates for the Teachers College Diploma in this field. The general normal school phases of the course are taken with Professor BAGLEY and the rural

phases with Professor Carney, making the course a combination of Education 415-416 (p. 61) and Education 275-276.

The work consists of lectures, readings, discussions, first-hand observation of normal schools, and a special study or paper on some problem of rural-teacher preparation under the joint direction of both instructors. The general topics presented by Professor Bagley are summarized in the statement for Education 415-416 on page 61. The special rural topics treated by Professor Carney include: the present status and shortage of rural teachers; the national program for education and its bearing upon the rural-teacher situation; state policies in rural-teacher training and supply; agencies employed in the preparation of rural teachers; the organization and administration of these agencies; courses of study: practice teaching, including amount, types, vearly scheme, lessoncourses of study; practice teaching, including amount, types, yearly scheme, lesson-planning, and supervision; rural demonstration schools; extension activities and the follow-up of graduates; relationships to other departments and other rural agencies; and future policies and developments in the preparation of rural teachers.

Education 477-478-Rural School Supervision. 6 points each Session. Miss Dunn and Professor Bonser.

Tu. and Th., 9-11.50.

This is the first professional course for rural supervisors of schools and county super-interedents, and is required of all students who are candidates for the Teachers College diploma in this field. It consists of lectures, discussions, and individual projects, which diploma in this field. It consists of lectures, discussions, and individual projects, which include field work and practice as well as papers, and covers both the general principles and problems of elementary supervision and those which are peculiar to the rural school field. The general elementary supervision phase is given by Professor BONSER, and is dientical with the class work of Education 41r-412 (p. 66), and the special rural phase is given by Miss DUNN, covering the following topics: aims and ideals of rural school supervision, as determined by a consideration of the place of the rural school in American education; special instructional problems of the rural school supervisor, including the curriculum and the one-teacher school; community relationships of the rural school supervisor, with special emphasis on health and recreation; administrative relationships, units of supervision and administration, and consolidation; important agencies of supervision and the technique of supervision in rural schools. technique of supervision in rural schools.

For Summer Session courses, see page 104.

For Unit courses, see page 38.

For Diplomas in Rural Education, see page 31.

RELIGIOUS EDUCATION

Education 261-262-Problems of Method in Religious Education. 2 points each Session. Professor TALLMAN, with the co-operation of Professors Coe and Hartshorne, and Miss Rankin.

M. and W. at 3.10.

An introductory course. Problems of method in teaching religion will be discussed in the light of contemporary educational science and existing conditions in Sunday Schools and other agencies for the religious education of children and young people. Attention will be given to special methods for the various departmental groups. For example, a series of lessons on beginners' and primary work which will include observation and discusion of demonstration teaching will be conducted. Practice in planning work for the various dear will be required. various ages will be required.

A special section of this course (Education 261A) will discuss problems of special interest

to workers in religious education in foreign fields.

Education 263-264—The Use of the Bible in Religious Education. 2 points each Session. Professor TALLMAN.

S., 11-12.50.

This course will consider the Bible as curriculum material, as well as curricula observed in the Union School of Religion and elsewhere. For those who desire it, a part of the work of this course may be practice in Sunday School teaching under supervision.

Education 461—Criticism and Supervision of Religious Instruction. 3 points. Professor Cog.

Tu. and Th. at 2.10, Winter Session.

Primarily for leaders of training classes. An advanced course on the foundations of method, the technique of teaching, and the supervision of teachers.

Education 462—The Curriculum of the Church School. 3 points. Professor Coe.

Hours to be arranged, Spring Session.

The theory of curriculum making, critical examination of existing curricula, practice in planning courses to meet particular needs.

Education 463-464—Educational Currents of the Present. 2 points each Session. Professor Coe.

F., 2.10-4.

A survey of the main types of educational theory and school practice with a view to determining their relations to the ethical and religious progress of society. Extensive readings, with discussions, written reviews, and criticisms.

Education 465-466—Practicum in Psychological Theories of Religion. 4 points each Session. Professor Coe.

Hours to be arranged.

Education 468—Introduction to the Psychology of the Christian Life. 3 points. Professor Coe.

Tu. and Th. at 4.10, Spring Session.

The purpose of this course is to enable the religious worker to make practical use of some of the simpler parts of psychology. The chief material upon which the class will work will be the religious experiences most commonly met in a parish.

Other courses in Religious Education may be taken by Teachers College students for graduate credit, in the Union Theological Seminary. These courses include:

Religious Education 25—The Religious Life of Children and Youth. Professor HARTHSORNE.

Religious Education 28—Organization and Administration of the Church School. Professor Hartshorne.

Religious Education 32—Special Methods with Adolescent Pupils. Professor Hartshorne.

For description of these courses, see the Announcement of the Union Theological Seminary.

BIBLICAL LITERATURE

Biblical Literature 149—The Religion of the Old Testament. 2 points. Professor Bewer.

M. and W. at 5.10, Winter Session.

This course treats of the history of the religion of Israel with special emphasis on the development of religious thought. It deals with the antecedents and background of Biblical Literature 150, but is complete in itself and may be taken separately.

Biblical Literature 150—The Religion of the New Testament. 2 points. Professor Bewer.

M. and W. at 5.10, Spring Session.

This course treats in an historical manner of the rise and development of the Christian religion in New Testament times, and is designed to give an understanding of the Christian religion and its place in life. It is the continuation of Biblical Literature 149, but may be taken separately.

These two courses are designed to lay a secure foundation of Biblical knowledge for those who are to teach in Sunday Schools or to train Sunday School teachers. Other courses in English Bible can be taken in the Union Theological Seminary.

Biblical Literature 152—The Religion of the Old Testament. 2 points.

Hours to be arranged, Spring Session.

A special section of Biblical Literature 149 adapted to the needs of Jewish students. In this course the historical development of the religion of the Bible is traced and its spiritual significance dealt with, from the standpoint of contemporary Jewish life and thought.

Biblical Literature 154-The Significance and Inspiration of the Bible. 2 points.

Hours to be arranged, Spring Session.

A special section of Biblical Literature 149 adapted to the needs of Catholic students.

Courses for Social-Religious Workers

Persons preparing for social-religious work as a profession will find courses of interest to them not only in religious education and Biblical literature but also in the offerings of such other departments as educational psychology, sociology, philosophy of education, criticism, and supervision of teaching, etc. Certain special courses have been planned in various departments of the School of Education and the School of Practical Arts, with reference to the specific needs of social-religious workers. For the convenience of this group of students such courses are listed here. For full description, see the appropriate Announcements.

Education 261x-262x—Field Work in Social-Religious Centers. 2 points each Session. Professor Tallman and others.

Conference hour, F. at 11. Field work to be arranged with the instructor. Conferences and lectures based upon the problems of club, class, and Sunday School work. Required of all candidates for the Social-Religious Workers Diploma.

Education 470—Practicum. Problems of Social-Religious Work. 3 points.

Hours to be arranged, Spring Session.

Consult Professor TALLMAN before registration.

This course should be elected by all students desiring advanced degrees in social-religious work.

Education 143B-144B-Industrial Arts for Social and Religious Workers. 2 points each Session. Miss Patrick.

Tu. and Th. 9-10.50.

This course includes typical studies of industry which are suitable for clubs and classes not directly connected with regular school instruction. Those interested in the problem of Americanization will find in this course suggestive means and methods.

Biology 104—Biology in Education and Social Work. 2 points. Professor Bigelow and Miss Stackpole.

M. and W. at 3.10, Spring Session.

Education 182—Dramatization. 2 points. Professor LATHAM. S., 9–10.50, Spring Session.

Education 293A—The Assimilation of the Immigrant as an Educational Problem. 2 points.
M. and W. at 11, Winter Session.

Household Arts 229-230-Problems in Cookery. 2 points each Session. Professor Van Arsdale.

Hours to be arranged.

Household Arts 281-282—Special Problems in Administration. 2 points each Session. Professor GUNTHER.

Conference M. at 2.10.

Nursing 105—Health Problems for Social and Religious Workers. 2 points. Professor STEWART.

W., W., and F. at 10, Spring Session.

Physical Education 154-Recreation Work in Social Centers. 2 points. Miss Colby. M., W., F. at 10, Spring Session.

Social Science 204—Modern Social Problems. 2 points. Mr. Shenton. Tu. and Th. at 3.10, Spring Session.

Sociology e142—Social Problems: Social Betterment. 3 points. Mr. SHENTON.

Th., 7.40–9.30, p. m., Spring Session. Given at Columbia.

Ethics 21—Industrial Conditions and Relations. 2 points. Professor Ward.

Tu. and Th. at 11, Winter Session.

Given at Union Theological Seminary with graduate credit.

Ethics 22—Principles and Programs of Social Reconstruction. 2 points. Professor WARD.

Tu. and Th. at 11, Spring Session.

Given at Union Theological Seminary with graduate credit.

Courses for Teachers in Foreign Fields

Education 269-270—Problems in Missionary Education. Lectures, readings, discussions, and inspection of schools. 2 points each Session. Dr. SAILER.

M. and W. at 10.

This course is intended for foreign missionaries on furlough and missionary candidates looking forward to educational work. It will discuss the distinctive aims of foreign missionary education, and the bearings on these of certain features of modern educationsal theory and practice. Missionaries from different fields will have an opportunity to compare their problems. Those taking the course will select subjects for special study and present them to the class for discussion.

Candidates for the Master's degree specializing in this field may do extra work in connection with this course which will be accepted to satisfy the requirements of the Master's

essay (see page 26).

Education 203B—Educational Development in Oriental Countries. 2 points. Dr. SAILER.

Hours to be arranged, Winter Session.

This course will outline the development of the educational systems of India, the Philippines, and Egypt, and indicate the problems of education in the Orient generally, including missionary education.

Education 261A-Problems of Method in Religious Education. 2 points. Professor TALLMAN, with the cooperation of Professors COE and HARTSHORNE.

Hours to be arranged, Winter Session.

A special section of Education 261 in which problems of method in teaching religion raised by workers from foreign fields will be given special consideration.

Education 422B—Education and Nationalism: The Development of Retarded National Cultures through Education. Professor Monroe.

Tu. and Th. at 4.10, Spring Session.

For description, see p. 44.

Courses for missionaries are offered for credit at Union Theological Seminary as follows: Foreign Missions; Mission Principles and Methods; Mission Sociology; Problems of Racial Contact; Modern Missions in India, all given by Professor Fleming. For details, see Announcement of the Union Theological Seminary.

In addition to fundamental courses in the philosophy of education, elementary and secondary education, etc., which will be of primary interest to missionaries, the special courses for social and religious workers, listed

above, should also be considered.

For Summer Session, courses, see p. 105. For Diplomas in Religious Education, see p. 31.

SCOUTING AND RECREATIONAL LEADERSHIP

Education 195A—Principles and Practices of Scouting and Scoutcraft. 2 points. Professor Fretwell, Mr. Smith, and specialists. M. and W. at 4.10, Winter Session.

This course given in co-operation with the National Council of the Boy Scouts of America and the National Council of the Girl Scouts of America is intended for both men and and the National Council of the Girl Scouts of America is intended for both men and women—school superintendents, principals, teachers, scout masters, scout captains, and all those interested in the training in citizenship by means of scouting. Due consideration will be given to the aims, programs, organizations, and constructive policies of the Boy and of the Girl Scout movements and to what these movements are doing and can do in training boys and girls to meet effectively present and future local and national needs. Such phases of scoutcraft will be included as camping, camp cooking, hiking, signaling, knot tying, first aid, tree study, troop formations, together with plans for organizing and conducting a troop. Opportunity will be provided for members of the cast as essistant scout masters or assistant scout coatsies under the direction of the to act as assistant scout masters or assistant scout captains under the direction of the Manhattan Council of Boy Scouts and the Manhattan Council of Girl Scouts of America.

Education 195B—Recreational Education. 2 points. Professor Fretwell, Mr. Atkinson, Mr. Smith, and specialists. M. and W. at 2.10, Winter Session.

This course is open to men and women who are interested in directing the affairs of boys and girls. The work will be divided into three units as follows: (1) Boys' and girls' clubs as a part of the school program: The aim, organization, kind of leadership, and methods of work of the boys' and girls' clubs of the Horace Mann and of other representative schools will be studied. An attempt will be made to work out a constructive policy for directing school clubs. (2) Boys' clubs outside of school: This unit, given in co-operation with the Boys' Club Federation, will consider the organization, program, and methods of boys' club work to meet community needs. There will be a detailed study of representative boys' clubs as independent organizations in New York. (3) Scouting, Camp Fire, and Woodcraft League: This unit will consider the aim, program, organization, and constructive policy of these movements together with the relation that should exist between them and the schools.

Education 289—Recreational Leadership in High Schools: A Course in Extra-curricular Activities. 2 points. Professor Fretwell. M. and W. at 10, Winter Session.

This course is intended for those who are to direct the recreational activities of secondary school pupils. An attempt will be made to work out constructive policies in the recreational phase of pupils' school activities whereby provision may be made for initiative, leadership, co-operation, and intelligent obedience. Six representative secondary schools, public and private, will be studied. Emphasis will be laid on a constructive program for directing such extra-curricular activities as: social, dramatic, musical, departgram for directing such extra-curricular activities as: social, dramatic, musical, departmental, and literary clubs; school papers and magazines; athletic teams and sports, and gymnasium exercises and games; boys' and girls' leagues; class organizations; such supplementary agencies as Boy Scouts of America, Girl Scouts, Woodcraft League, and Camp Fire Girls. There will be included a plan for a Students' Council or general organization for directing pupil activities in a small and a large high school.

Students expecting to take this course are urged to bring with them data regarding extra-curricular activities in their own school. Admission to the course is by permission of the instructor.

of the instructor.

Physical Education 197-198—Clubcraft. I point each Session. Mr. Smith. M. at 11.

This course is intended to give the practical training required by club leaders and supervisors. A study of the principles, aims, and programs of the better established club movements and organizations will be made. Actual practical work will be done and opportunity provided for observation and study of Horace Mann clubs.

U25-26—Scouting and Camping for Boys. Professor Fretwell. Th., 8-10 p.m., March 11 to May 27. This counts as two unit courses.

U46—Scouting and Camping for Girls—Professor Fretwell. S., 2.30-4.20, April 10 to May 15. This counts as one unit course.

For Summer Session courses, see p. 105.

For Unit courses, see p. 38. For Diplomas in Scouting, see p. 32.

VI. PRACTICAL ARTS EDUCATION

HOUSEHOLD ARTS

For detailed information regarding courses in Household Arts and the Teaching of Household Arts, see the Announcement of the School of Practical Arts.

Education

Education 135-136—Teaching of Household Arts in Schools. 2 points each Session. Professors Cooley, Winchell, and Spohr, and Miss Marshall.

Education 135x—Preliminary Practical Work in Household Arts Teaching. 1 point.

Education 136x—Practical Work in Household Arts Teaching. Supplementary to Education 135–136. 2 points.

Education 136A—Teaching of Household Arts in Vocational Schools or Classes for Girls. 2 points. Special lecturers.

Education 137-138—Supervision in the Household Arts. 2 points each Session. Professors Cooley and Winchell.

Education 140—Household Arts in Rural Communities. 2 points. Professor Spohr.

Education 140x—Practical Work. Supplementary to Education 140. 2 points. Professor Spohr.

Education 335-336—Organization and Teaching of Household Arts in Normal Schools and Colleges. 2 points each Session. Professors Cooley and Winchell, and others.

Education 336x—Practice Teaching in Household Arts. 2 points. Professors Van Arsdale, Winchell, Fales, Cooley, and Gunther.

Education 337-338—Practicum in Household Arts Education. 4 points each Session. Professors Cooley and Winchell.

Education 294B-Vocations for Girls and Women. 2 points.

Administration

Household Arts 180—Institution Organization and Administration. 2 points. Miss Fisher.

Household Arts 281–282—Special Problems in Administration. 2 points each Session. Professor Gunther and others.

Household Arts 291-292—Practicum in Household Administration. 4 points each Session. Professor Gunther.

Biology

Biology 104—Biology in Education and Social Work. 2 points. Professor BIGELOW and Miss STACKPOLE.

Biology 153-154—Special Problems in Applied Biology (including Bacteriology). 4 points each Session. Professors BIGELOW and BROADHURST.

Biology 253-254—Advanced Bacteriology Applied to Practical Arts. 4 points each Session. Professor BROADHURST.

Chemistry

Household Arts 121–122—Household Chemistry—Advanced. 3 points each Session. Professor Vulté and Miss Vanderbilt.

Household Arts 127—Methods of Biochemical Analysis. 4 points. Dr. Heft.

Household Arts 225—Physiological Chemistry. 4 points. Professor Gies, Dr. Eddy, and Dr. Heft.

Household Arts 227-228—Research in Biological Chemistry. 4 points each Session. Professor Gies, Dr. Eddy, and Dr. Heft.

Clothing

Household Arts 203–204—Problems in Clothing. 3 points each Session. Professor Fales and other instructors.

Cookery

Household Arts 131—Experimental Cookery. 4 points. Professor VAN ARSDALE, Miss COLMAN, and Miss CONWAY.

Household Arts 133—Cookery for Invalids. 2 points. Miss Peacock and Miss Stone.

Household Arts 229–230—Problems in Cookery. 4 points each Session. Professor Van Arsdale and other instructors.

Household Arts 232—Research in Cookery. 4 points. Professor VAN ARSDALE and Miss COLMAN.

Economic Science

Practical Arts 158—Thrift, Savings, and Investment. 2 points. Mr. Breckenridge.

Practical Arts 164—Economic Problems. The Worker and the Community. 2 points. Professor Andrews. Not given in 1919–1920.

Household Arts 165—The Household in Economic Production. 2 points. Professor Andrews.

Household Arts 166—Household Budgets. 2 points. Professor Andrews. Not given in 1919–1920.

Household Arts 266—Problems of Household Economic Science. 3 points. Professor Andrews.

Nutrition

Household Arts 115—Nutrition and Food Economics. 2 points. Professors Sherman and Rose.

Household Arts 117—Laboratory Methods in Nutrition. 4 points. Professor Rose and Miss MacLeod.

Household Arts 210—Dietetics. 4 points. Professor Rose, Miss MacLeod, and Miss Barto.

Household Arts 210a—Lectures on Dietetics. 2 points. Professor Rose. Household Arts 215–216—Practicum in Nutrition and Food Economics. 3 points each Session. Professors SHERMAN and ROSE.

Household Arts 218—Investigation in Nutrition or Food Economics. 4 points. Professor Rose or Sherman.

Household Fine Arts

Fine Arts 125–126—Clay Modeling and Pottery. 2 points each Session. Mr. UPJOHN

Fine Arts 151-152—Art Structure C. 3 points each Session. Professors Dow and Cornell.

Fine Arts 169–170—Art Appreciation. 2 points each Session. Professors Dow and Martin, Miss Bliss, Miss Dement, and others.

Fine Arts 180—Home Furnishing for Graduate Students. 3 points. Mrs. Ackerman and special lecturers.

Fine Arts 189-190—House Decoration—Advanced. 3 points each Session. Mr. Moran.

Fine Arts 281–282—Art Structure D. 3 points each Session. Professors Dow and Cornell.

Fine Arts 283–284—Painting. 4 points each Session. Professor Bement. Fine Arts 291–292—Costume Illustration—Advanced. 3 points each Session. Miss Northrup.

Fine Arts 182—Art for School and Community Festivals. 2 points. Miss Northrup.

FINE ARTS

For detailed information regarding courses in Fine Arts and the Teaching of Fine Arts, see the Announcement of the School of Practical Arts,

Education III-II2—Theory and Practice of Teaching Art. 2 points each Session. Professor Dow and Miss Dement.

Education IIIX—Preliminary Practical Work in Art Teaching. 2 points. Miss Dement.

Education II2x—Practical Work. Supplementary to Education III-II2. 2 points. Miss Dement.

Education 113-114—Supervision of Fine Arts. 2 points each Session. Professor Dow.

Education 311-312—Practicum. 4 points each Session. Professor Dow.

GEOGRAPHY

Geography 105–106—Industrial and Commercial Geography. 2 points each Session. Professor McFarlane and Mr. Lehnerts.

HISTORY

History 145-146—Social and Industrial History of the United States. 3 points each Session. Professor Gambrill.

Education 221—History of the Family as a Social Institution. 2 points. Professor Goodsell.

Education 222—Education of Women: History and Present Problems. 2 points. Professor Goodsell.

HYGIENE

Hygiene 175—Sanitary Science. 2 points. Professors Winslow and Broadhurst.

Household Arts 185–186—Public Health Investigation. 2 points each Session. Professor Winslow.

INDUSTRIAL ARTS

For detailed information regarding courses in Industrial Arts, see the Announcement of the School of Practical Arts.

Education 143-144—Industrial Arts for the Elementary Grades (including Industrial Arts for Exceptional Children, Defectives, and Delinquents). 2 points each Session. Miss Patrick.

Education 143A-144A—Experimental Problems in Industrial Arts for the Elementary Grades. 2 points each Session. Miss PATRICK.

Education 143B-144B—Industrial Arts for Social and Religious Workers. 2 points each Session. Miss Patrick.

Education 145-146—Teaching Industrial Arts in Elementary Schools. 2 points each Session. Mrs. Mossman and Professor Bonser.

Education 146x—Practical Work. Supplementary to Education 145-146. 2 points.

Education 147-148—Principles and Practice of Teaching Industrial Arts in the Junior High School. 3 points each Session. Mr. BOWMAN.

Education 148x—Practice Teaching. Supplementary to Education 147–148. 2 points.

Industrial Arts 149 and 150—Analysis of Industries for Teaching and Vocational Guidance. 3 points each Session. Mr. Bowman.

MUSIC

For detailed information regarding courses in Music, see the Announcement of the School of Practical Arts.

Music 169-170—Musical Art. 2 points each Session. Professor FARNS-WORTH.

Education 161-162—The Teaching of School Music. 2 points each Session. Miss Latham.

Education 162x—Practical Work. Supplementary to Education 161-162. 2 points.

Education 163-164—Supervision of School Music. 2 points each Session. Professor Farnsworth.

Education 164x—Practical Work. Supplementary to Education 163-164. 2 points.

Education 363-364—Practicum in the Teaching of School Music. 3 points each Session. Professor FARNSWORTH.

SPEECH

For undergraduate courses in Speech, see the Announcement of the School of Practical Arts.

Education 167–168—Teaching of Speech (Oral English). 2 points each Session. Professor LATHAM and assistant.

Education 181—School and Community Festivals. 2 points. Professor Latham, assisted by Professors Wood, Farnsworth, Dow, Abbott, and Van Arsdale; and Miss Colby, Miss Wilmot, Miss Northrup, Miss Diller, and Miss Beaumont.

Education 181x—Practical Work. 2 points.

Education 182—Dramatization. 2 points. Professor Latham and assistant.

NURSING AND HEALTH

For detailed information regarding courses in Nursing and Health, see the Announcement of the School of Practical Arts.

Nursing 105—Health Problems for Religious and Social Workers. 2 points. Professor Stewart.

Nursing 121-122—History of Nursing. 2 points each Session. Professors NUTTING and STEWART.

Nursing 144—Nursing in Relation to Municipal Health Work. 2 points. Dr. Baker.

Education 170—Teaching of Nursing Principles and Methods. 2 points. Professor Stewart.

Education 170x—Nursing Practice. Supplementary to Education 170. I point.

Education 171—Teaching in Schools of Nursing. 2 points. Professor STEWART.

Education 171x—Observation and Practice Work. Supplementary to Education 171. 2 points.

Education 173-174—Administration in Schools of Nursing. 2 points each Session. Professor Nutting.

Education 175—Current Problems in the Education of Nurses. 2 points. Professor NUTTING.

Education 176—Teaching of Health Principles. 2 points. Miss Hudson. Education 176x—Teaching Practice. Supplementary to Education 176. I point.

Education 177—Training of Public Health Nurses. 2 points.

Education 178—Organization and Supervision in Public Health Nursing. 2 points. Miss Crandall and special lecturers.

Education 179—Methods of Teaching Occupations in Hospitals. 2 points. Miss Johnson.

Education 179x—Practice Teaching and Conferences. 3 points.

Education 371-372—Practicum in Nursing. 2 points each Session. Professor NUTTING.

PHYSICAL EDUCATION

For detailed information regarding courses in Physical Education, see the Announcement of the School of Practical Arts.

For courses in Educational Hygiene, see p. 60.

Physical Education 154—Recreation Work in Social Centers. 2 points. Miss Colby and assistant.

Physical Education 197–198—Clubcraft. 1 point each Session. Mr. Smith.

Physical Education 295-296—Problems in Hygiene and Physical Education. 3 points each Session. Professors Wood, WILLIAMS, and others.

Physical Education 295x-296x—Practical Work. Supplementary to Physical Education 295-296. 3 points each Session. Professors Wood, WILLIAMS, and others.

Education 181—School and Community Festivals. 2 points. Professor Latham, assisted by Professors Wood, Farnsworth, Dow, Abbott, and Van Arsdale, and Miss Colby, Miss Wilmot, Miss Northrup, Miss Diller, and Miss Beaumont.

Education 183–184—Educational Hygiene. 2 points each Session. Professor Wood.

Education 185-186—Play and Playgrounds and Community Centers. 2 points each Session. Mr. GIBNEY.

Education 186x—Practical Work. Supplementary to Education 185-186. 2 points. Mr. Gibney.

Education 187–188—Hygiene of Childhood and Adolescence. 2 points each Session. Professor Wood.

Education 189–190—Teaching of Hygiene and Physical Education. 2 points each Session. Professors Wood, Williams, and assistants.

Education 190x—Practical Work. Supplementary to Education 189-190. 2 points.

Education 193-194—Dramatic Expression in Physical Education. 2 points each Session. Miss Colby and Madame Alberti.

Education 389-390—Practicum in Hygiene and Physical Education. 3 points each Session. Professor Wood.

SOCIAL SCIENCE

Social Science 110—Public Health and Standard of Living. 2 points. Professor Chaddock.

Social Science 204-Modern Social Problems. 2 points. Mr. Shenton.

VII. SUMMER SESSION, 1919

The Summer Session of Teachers College is an integral part of the Summer Session of the University. It continues over a period of six weeks, beginning July 7 and ending August 15, 1919 (see p. 32). The complete Announcement of the Summer Session, describing in full each of the courses offered, may be had without charge on application to the Secretary of Teachers College.

The following courses will be offered by the School of Education and the School of Practical Arts during the Summer Session of 1919. In addition to these courses many undergraduate courses in Practical Arts are offered in the School of Practical Arts, which are described in the complete Announcement of the Summer Session.

HISTORY AND PRINCIPLES OF EDUCATION

History of Education

Education sBa—History of Education: Historic Foundations of Modern Education. 2 points. Professor Monroe.

Education sBb—History of Education in Modern Times. 2 points. Professor Goodsell.

Education sBc—Principles of Education. 2 points. Professor Reisner. Education s222—The Education of Women. 2 points. Professor GOODSELL.

Education s421—History of Education: Historic Foundations of Modern Education. 3 points. Professor Monroe.

Education \$422—History of Education in Modern Times: Nationalism and Education. 3 points. Professor REISNER.

Philosophy of Education

Education sBc—Principles of Education. 2 points. Professor Reisner. Education 2—Principles of Education. 4 points. Professor MADDOX and Professor REISNER.

Education s2a—Principles of Method. 2 points. Professor MADDOX.

Education s241—Philosophy of Education. 2 points. Professor KIL-

Education s244—Foundations of Method. 2 points. Professor KIL-PATRICK.

Education \$441—Practicum. Philosophy of Education. 4 points. Professor KILPATRICK.

Educational Sociology

Education s292—Problems of Curricula. 2 points. Professor SNEDDEN. Education s206A—Problems for Advisers of Women and Girls. 2 points. Professors Goodsell, Snedden, and others.

Education s273—Rural Sociology and Social Surveys. 2 points. Dr. W. H. WILSON.

Education s493A—Americanization of the Immigrant. 3 points. Mr. GOLDBERGER.

EDUCATIONAL PSYCHOLOGY AND MEASUREMENTS

Education sAa—Educational Psychology. 2 points. Professor Ruger.

Education sAb—Educational Psychology. 2 points. Professor WHITLEY.

Education s215x—Observation, Experimentation, and Teaching in Connection with Special Classes. 2 points. Miss Keator.

Education s252A—The Psychology of Childhood. 2 points. Professor Whitley.

Education s253—Psychology and Treatment of Exceptional Children. 2 points. Professor L. S. HOLLINGWORTH.

Education s254—The Measurement of Intelligence. 2 points. Professor L. S. Hollingworth.

Education s411B—Measurement in Elementary Education. 3 points. Professor McCall.

Education s412B—Experimentation in Elementary Education. 3 points. Professor McCall.

Education s451—Educational Psychology. 4 points. Professor Colvin. Education s453—Practicum. Application of Psychological and Statistical Methods to Education. 4 points. Professor Ruger.

Education s458B—Psychology of the Secondary School Subjects. 3 points. Professor Colvin.

EDUCATIONAL ADMINISTRATION AND SCHOOL SUPERVISION

Administration of Education

Education s201—State and County School Administration. 2 points. Professor Trabue.

Education s202—City School Administration. 2 points. Professor STRAYER.

Education s202B—The Principal and his School. 2 points. Superintendent HUNTER.

Education s208—Classroom Organization and Administration. 2 points. Mr. Evenden.

Education s209—Business Administration of Schools. 2 points. Professor Engelhardt.

Education s284—Administrative Problems of the High School. 2 points. Mr. Davis.

Education s289A—Organization and Administration of the Junior High School. 2 points. Professor Briggs.

Education s294—Administration of Vocational Education. 2 points. Professors SNEDDEN and DEAN.

Education s401—Administration of Educational Tests. 4 points. Professor Trabue.

Education s403-404—Practicum. School Surveys and Other Investigations in Educational Administration. 8 points. Professors Strayer, Engelhardt, and Mr. Evenden.

Education s418—Normal School Administration. 3 points. Professor BAGLEY.

Education s494—Practicum. Administration of Industrial Education. 6 points. Professor Dean.

Supervision of Instruction

Education s213B—Principles and Practice of Supervision with Illustrations from the Demonstration School. 2 points. Mr. HUNT.

Education s214—Socializing the Elementary School Curriculum. 2 points. Professor Bonser.

Education s214A—The Technique of Teaching. 2 points. Professor BAGLEY.

Education s217—Problems in Class Teaching in the Elementary School in Relation to Social Reconstruction. 2 points. Miss DAY

Education s219A—Problems in Supervision in Elementary Schools. 2 points. Miss Tall.

Education s277—Supervision and Administration of Rural Schools. 2 points. Professor Carney and Miss Dunn.

Education s411—Supervision of Teaching. 3 points. Professor Hosic. Education s411A—Current Problems of Supervision. 3 points. Professor Hosic.

Education s412A—Supervision in Elementary Schools. 3 points. Miss Day.

Education s413—Practicum. The Making of the Elementary School Curriculum. 4 points. Professor Bonser.

Education s417x—Experimental Teaching and Supervision. 3 points. Miss DAY.

Education \$432—Practicum. Current Problems in the Supervision of Kindergartens and the Training of Kindergarten Teachers. 4 points. Professor Hill.

Education s486—The Supervision of Instruction in Secondary Schools. 4 points. Professor BRIGGS.

Education s493A—Americanization of the Immigrant. 3 points. Mr. GOLDBERGER.

THEORY AND PRACTICE OF TEACHING

Methods in Lower Primary

Education s101—Play Materials in the Education of Young Children. 2 points. Miss Garrison.

Education s101A—Dramatic Arts, Plays, Games, and Dances of Early Childhood. 2 points. Miss BARBOUR.

Education s102—Beginnings of Music for Young Children. 2 points. Miss Robinson.

Education sto3—Studies and Experiments with Materials Leading to the Fine Arts. 2 points. Miss Brown.

Education s104—Studies and Experiments with Play Materials Leading to the Industrial Arts. 2 points. Miss Brown and Miss Harrison.

Education \$109—Literature in the Primary School. 2 points. Miss MOORE.

Education s432—Practicum. Current Problems in the Supervision of Kindergartens and the Training of Kindergarten Teachers. 4 points. Professor Hill.

Education s436A—A Study of Experiments in the Education of Young Children. 3 points. Professor Hill.

Methods in Elementary Schools

Education s10—Observation in the Demonstration School. I point. Professors Pearson, Maddox, and Mr. Hunt.

Education s2a—Principles of Method. 2 points. Professor MADDOX.

Education s31—Methods of Teaching in Elementary Schools. Primary Grades. 2 points. Miss Moore.

Education s32—Methods of Teaching in Intermediate and Grammar Grades for Inexperienced Teachers. 2 points. Miss TALL.

Education s36—The Teaching of English in Grammar Grades. 2 points. Professor BAKER.

Education s37—Methods of Teaching English to Foreigners. 2 points. Mr. GOLDBERGER.

Education s145—Teaching and Supervision of Industrial Arts in Elementary Schools. 2 points. Mrs. Mossman and Professor Bonser.

Education s213B—Principles and Practice of Supervision with Illustrations from the Demonstration School. 2 points. Mr. HUNT.

Education s213C—Experimental Schools, Their Aims, Organization and Achievements. 2 points. Professor Pearson and Mr. Hunt.

Education s214—Socializing the Elementary School Curriculum. 2 points. Professor Bonser.

Education s214A—The Technique of Teaching. 2 points. Professor BAGLEY.

Education s214B—The Rural Elementary Curriculum. 2 points. Miss Dunn.

Education s217—Problems in Class Teaching in the Elementary School in Relation to Social Reconstruction. 2 points. Miss DAY.

Education s219A—Problems in Supervision in Elementary Schools. 2 points. Miss Tall.

Education s411—Supervision of Teaching. 3 points. Professor Hosic. Education s411A—Current Problems of Supervision. 3 points. Professor Hosic.

Education s411B—Measurement in Elementary Education. 3 points. Professor McCall.

Education s412A—Supervision in Elementary Schools. 3 points. Miss Day.

Education s412B—Experimentation in Elementary Education. 3 points. Professor McCall.

Education s413—Practicum. The Making of Elementary School Curricula. 4 points. Professor Bonser.

Education \$417x—Experimental Teaching and Experimental Supervision. 3 points. Miss DAY,

Education s493A—Americanization of the Immigrant. 3 points. Mr. GOLDBERGER.

Methods in Secondary Schools

GENERAL COURSES

Education s199—The Science Courses in the High School. 2 points. Professor Caldwell and Mr. Glenn.

Education s281—General Methods in the Secondary School. 2 points. Miss Converse.

Education s284—Administrative Problems of the High School. 2 points. Mr. Davis.

Education s285—The Curriculum of the Secondary School. 2 points. Mr. Davis.

Education s290—Recreational Leadership in High Schools. 2 points. Professor Fretwell.

Education s458B—Psychology of the Secondary School Subjects. 3 points, Professor Colvin.

Education s486—Supervision of Instruction in the Secondary School. 4 points. Professor Briggs.

Junior High School

Education s281A—The Theory and Practice of Teaching in the Junior High School. 2 points. Miss CONVERSE.

Education s289A—Organization and Administration of the Junior High School. 2 points. Professor Briggs.

Education s292—Problems of Curricula. 2 points. Professor SNEDDEN. Education s305B—The Teaching of Literature in the Junior High School. 3 points. Mr. Leonard.

Education s306B—The Teaching of English Composition and Grammar in the Junior High School. 3 points. Mr. Hudelson.

Education s212r—The Teaching of Regional Geography in the Junior High School. 2 points. Professor CALKINS.

Education s332A—The Teaching of History. 3 points. Professor GAMBRILL.

Education s211c—Illustrative Lessons in American History. 2 points. Miss Bucks.

Education s212d—Illustrative Lessons in Citizenship. 2 points. Mr. HATCH.

Education 5117—The Direct Method of Teaching French. Demonstration Class. 2 points. Professor Méras.

Education s119—Demonstration Class in the Teaching of Spanish. 2 points. Miss Thomas.

Education s151—Methods of Teaching Latin. 2 points. Dr. CHICKERING.

Education s152—Demonstration Class in Beginning Latin. 2 points. Dr. CHICKERING.

Education s211d—The Teaching of General Science in the Junior High School. 2 points. Mr. WILLIAMS.

Education s212p—The Teaching and Supervision of Mathematics in the Junior High School. 2 points. Professor UPTON.

Industrial Arts s101—Industrial Arts for the Junior High School. 2 points. Mr. BOWMAN and Mr. CAMPBELL.

Education s147—Theory and Practice of Teaching Industrial Arts in Junior High Schools. 2 points. Mr. BOWMAN and Mr. CAMPBELL.

Education s297A—The Teaching of Practical Arts in Junior High Schools. 2 points. Professors SNEDDEN, DEAN, BONSER, COOLEY, and CARNEY.

Education s195C—Principles and Practices of Scouting and Scoutcraft. 2 points. Professor Fretwell, Mr. Smith, and special lecturers.

Biology

Biology \$104—Social Hygiene and Sex Education. 2 points. Professor BIGELOW, Miss STACKPOLE, and special lecturers.

Biology s4a—Biological Aspects of Social Hygiene. I point. Professor BIGELOW and Miss STACKPOLE.

Biology S153—Biology Applied to Physiology and Hygiene for Teachers. 2 points. Miss Stackpole and Professor Bigelow.

Biology s253—Problems of Applied Biology (including Bacteriology). 3 points. Professor Broadhurst.

Education \$105—Nature-Study for Teachers. 2 points. Professors Broadhurst and Bigelow, and Miss Stackpole.

Education s199—The Science Courses in the High School. 2 points. Professor CALDWELL and Mr. GLENN.

Education s30IA—Methods of Teaching Applied Biology, Zoology, and Physiology in High Schools. I point. Professors BIGELOW and BROADHURST, and Miss STACKPOLE.

Education \$301B—Practical Work in Biology. I point.

Education s302—Botany in High Schools. 2 points. Professor CALD-WELL.

Education s212g—The Teaching of Nature-Study in Elementary Schools. I point. Professors Broadhurst and Bigelow.

Nature-Study si—Biological Nature-Study. 2 points. Professor Broadhurst and Miss Stackpole.

English

Education s36—The Teaching of English in Grammar Grades. 2 points. Professor BAKER.

Education s37—Methods of Teaching English to Foreigners. 2 points. Mr. GOLDBERGER.

Education s61—The Foundations of High School Literature. 2 points. Mr. HUDELSON.

Education \$109—Literature in the Primary School. 2 points. Miss Moore.

Education s305A—The Teaching of Literature in Secondary Schools. 3 points. Professor Baker.

Education s306A—The Teaching of English Composition in Secondary Schools. 3 points. Mr. LEONARD.

Education s305B—The Teaching of Literature in the Junior High School. 3 points. Mr. LEONARD.

Education s306B—The Teaching of English Composition and Grammar in the Junior High School. 3 points. Mr. HUDELSON.

Library Economy s2—Administration of the School Library. 2 points. Miss Wilson.

Speech s3—Story-telling—Introductory. 2 points. Mrs. Hallock.

Geography

Education s212e—The Teaching of Geography in the Lower Grades. I point. Professor Calkins.

Education s212f—The Teaching of Geography in the Upper Grades. I point. Professor Calkins.

Education s212r—The Teaching of Regional Geography in the Junior High School. I point. Professor CALKINS.

Education s121—Geographical Relationships. 2 points. Professor CALKINS.

History

Education s133A—The Teaching of Citizenship in Secondary Schools. 2 points. Mr. HATCH.

Education s211c—Illustrative Lessons in American History. 2 points. Miss Bucks.

Education s212d—Illustrative Lessons in Citizenship. 2 points. Mr. HATCH.

Education s332A—The Teaching of History. 3 points. Professor Gambrill.

Education s332B—Industrial and Social Aspects of History. 3 points. Professor Gambrill.

Latin

Education s151—Methods of Teaching Latin. 2 points. Dr. CHICKERING. Education s152—Demonstration Class in Beginning Latin by the Direct Method. 2 points. Dr. CHICKERING.

Mathematics

Education s211e—The Teaching and Supervision of Elementary Arithmetic. First Six Grades. I point. Professor UPTON.

Education s212h—The Teaching and Supervision of Arithmetic. Grammar Grades. I point. Professor UPTON.

Education s212p—The Teaching and Supervision of Mathematics in the Junior High School. 2 points. Professor UPTON.

Education \$357—Theory and Practice of Teaching Algebra in Secondary Schools. 3 points. Professor UPTON and Mr. Breckenridge.

Education s358—Theory and Practice of Teaching Geometry in Secondary Schools. 3 points. Professor UPTON and Mr. BRECKENRIDGE.

Education s157A—Commercial Mathematics for High School Teachers. 2 points. Mr. Schlauch.

Education s157B—The Teaching of Commercial Mathematics in High Schools. 2 points. Mr. SCHLAUCH.

Education s159—The Teaching of Applied Mathematics. 2 points. Mr. Breckenridge.

Education s160—Laboratory in Applied Mathematics. 2 points. Mr. Breckenridge.

Mathematics s31—Industrial Mathematics. 2 points. Mr. Brecken-RIDGE.

Modern Languages

Education s117—The Direct Method of Teaching French. Demonstration Class. 2 points. Professor Méras.

Education s118—French in Secondary Schools—Study of Material. 2 points. Professor Méras.

Education 5119—Demonstration Class in the Teaching of Spanish. 2 points. Miss THOMAS.

Education s120—Spanish in Secondary Schools—Study of Material. 2 points. Miss Thomas.

Education \$327A—The Teaching of Modern Languages in Secondary Schools. 3 points. Professors Bagster-Collins and Méras, and Miss Thomas.

Education s330—Selection and Editing of Modern Language Material. 3 points. Professor Bagster-Collins.

Physical Science

Education s197—The Teaching of Physics in Secondary Schools. 2 points. Mr. Good.

Education s197A—The Teaching of Laboratory Physics in Secondary Schools. 2 points. Mr. Good.

Education s198—The Teaching of Chemistry in Secondary Schools. 2 points. Mr. WILLIAMS.

Education s199—The Science Courses in the High School. 2 points. Professor CALDWELL and Mr. GLENN.

Education s211d—The Teaching of General Science in Elementary and Junior High Schools. 2 points. Mr. WILLIAMS.

Education s397—Practicum. The History and Teaching of Physical Science. 4 points. Mr. Good.

VOCATIONAL EDUCATION

Vocational Education

Education s294—Administration of Vocational Education. 2 points. Professors SNEDDEN and DEAN.

Education s297—Vocational Guidance and Employment Supervision. 2 points. Mr. Weaver.

Education s297A—The Teaching of Practical Arts in Junior High Schools. 2 points. Professors SNEDDEN, DEAN, BONSER, COOLEY, and CARNEY.

Education s494—Practicum. Administration of Industrial Education. 6 points. Professor Dean.

Industrial Arts s150—Analysis of Industries for Teaching and Vocational Guidance. 2 points. Mr. Bowman.

Rural Education

Education s75—The Improvement of Country School Teaching. 2 points. Professor CARNEY and Miss DUNN.

Education s140—Organization and Administration of Household Arts in Rural Communities. 2 points. Miss SAYLES.

Education s214B—The Rural Elementary Curriculum. 2 points. Miss Dunn.

Education s273—Rural Sociology and Social Surveys. 2 points. Dr. Wilson.

Education s273x—Rural Sociology and Social Surveys. 2 points. Dr. Wilson,

Education s274—Rural Economics in Europe and America. 2 points. Dr. WILSON,

Education s275—The Preparation of Rural Teachers. 2 points. Professor Carney.

Education s277—Supervision and Administration of Rural Schools. 2 points. Professor Carney and Miss Dunn.

Religious Education

Education s261A—Teacher-Training Courses in the Sunday School. 2 points. Professor TALLMAN.

Education s264A—Courses of Study for the Sunday School. 2 points.

Professor Tallman.

Education 5144b—Industrial Arts for Social and Religious Workers. 2 points. Miss Patrick and Miss House.

Scouting and Recreational Leadership

Education s195C—Principles and Practices of Scouting and Scoutcraft. 2 points. Professor Fretwell, Mr. Smith, and special lecturers.

Education s195D—Scout Executives Course. 2 points. Professor Fretwell, Mr. Smith, and special lecturers.

Education s290—Recreational Leadership in High Schools. 2 points. Professor Fretwell.

PRACTICAL ARTS

Household Arts

Education s135A—Teaching of Clothing, Textiles, and House Furnishing in Elementary Schools. 2 points. Miss Chace.

Education s135B—Teaching of Foods, Nutrition, and Sanitation in Elementary Schools. 2 points. Miss Marshall.

Education s136A—Teaching of Clothing, Textiles, and House Furnishing in Secondary Schools. 2 points. Miss Chace.

Education s136B—Teaching of Foods, Nutrition, and Sanitation in Secondary Schools. 2 points. Professor WINCHELL.

Education s137—Supervision of Household Arts in Schools. 2 points. Professor Cooley.

Education s140—Organization and Administration of Household Arts in Rural Communities. 2 points. Miss SAYLES.

Household Arts \$121—Household Chemistry—Advanced. 3 points. Professor VULTÉ.

Household Arts s180—Institution Organization and Administration. 2 points. Miss Fisher.

Household Arts s225—Physiological Chemistry. 4 points. Professor Gies and Dr. Heft.

Household Arts s210—Dietetics. 4 points. Professor Rose.

Household Arts s229—Problems in Cookery for Graduate Students. 4 points. Professor VAN ARSDALE.

Household Arts s231—Experimental Cookery—Advanced. 4 points. Professor Van Arsdale and others.

Household Arts s283—Problems of Administration for Graduate Students. 4 points. Miss Fisher.

Household Arts s166-Household Budgets. 2 points.

Fine Arts

Education sIIIa—Teaching of Fine Arts. I point. Miss Boas.

Fine Arts ${\tt s182-\!Design}$ for School and Community Festivals. 2 points. Miss Northrup.

Fine Arts s251—Art Structure for Graduate Students. 3 points. Mrs. ATWELL and Miss Boas.

Fine Arts s283—Advanced Painting for Graduate Students. 3 points. Professor Martin.

Fine Arts s283x—Advanced Painting. I point. Professor MARTIN.

Fine Arts s291—Costume Design for Advanced Students. 3 points. Miss Murphy.

Industrial Arts Education

Education s143a—Industrial Arts for Primary Grades. I or 2 points. Miss Bentley and Miss McHale.

Education 5143b and 5144—Industrial Arts for Intermediate Grades. Each 2 points. Miss Patrick and Miss House.

Education s144b—Industrial Arts for Social and Religious Workers. 2 points. Miss Patrick and Miss House.

Education \$145—Theory and Practice of Teaching and Supervising Industrial Arts in Elementary Schools. 2 points. Mrs. Mossman and Professor Bonser.

Education \$147—Theory and Practice of Teaching Industrial Arts in Junior High Schools. I or 2 points. Mr. BOWMAN and Mr. CAMPBELL.

Education s147x—Practice Teaching, supplementary to Education s147. Industrial Arts s101—Industrial Arts for the Junior High School. 2 points. Mr. BOWMAN and Mr. CAMPBELL.

Industrial Arts s150—Analysis of Industries for Teaching and Vocational Guidance. 2 points. Mr. Bowman.

Music and Speech

Education s161a—The Teaching of School Music. 2 points. Miss BUERMEYER.

Education s161b—Demonstrations in the Teaching of School Music and the Use of the Talking Machine. I point. Miss BUERMEYER and Miss RHETTS.

Speech s157—Speech Correction. 2 points. Mrs. Scripture.

Nursing and Health

Education \$170—Teaching of Nursing Principles and Methods. 2 points. Miss Gray.

Education \$176—Teaching of Health Principles. I point. Miss Hudson.

Physical Education

Hygiene s172—Personal Hygiene. 2 points. Miss Reesor.

Education s185—Fundamentals of Playground and Recreation Work. 2 points. Mr. Fette.

Education \$190—Teaching of Physical Education. 2 points. Miss Colby, Miss Weston, and Mr. Wardlaw.

Education s190x—Observation and Practice in Connection with Education s189. I point.

Education s193—Dramatic Expression in Physical Education. 2 points. Madame Alberti and Miss Colby.

Physical Education \$154—Community Service and Recreation. 2 points. Miss Gross.

FELLOWSHIPS, SCHOLARSHIPS, AND GRANTS

Teachers College awards annually a number of fellowships, forty or more scholarships, and a number of grants for foreign research, all, except where special announcement is made to the contrary, open to men and women.

Fellowships and Research Scholarships

A special Fellowship Fund, of not less than four thousand dollars, is assigned annually at the discretion of the Faculties to Fellows and Research Scholars; the normal assignment to a fellowship being five hundred, that to a research scholarship two hundred and fifty dollars. Any unexpended balance in the Fellowship Fund may be assigned to graduate students under the regulations that obtain for the award of graduate scholarships.

The competition is open to all applicants who are qualified to become candidates for the higher degrees and diplomas and who give evidence of special fitness to pursue courses of advanced study and original investigation in the various fields of education, including practical arts education. The term of each fellowship is one year, dating from July I, residence beginning at the opening of the academic year in September. In the event of a vacancy from any cause, the Faculties may fill such vacancy for the unexpired term in the same manner in which original appointments are made. A Fellow may be reappointed at the end of a year for reasons of weight. No Fellow may be appointed for more than two terms of one year each.

All Fellows are required to pursue their studies at this University during the term of their fellowship unless permission be granted them by the Faculties to study elsewhere. Every holder of a fellowship is expected to perform such duties as may be allotted to him in connection with his course of study, which must be one leading to a Master's or a Doctor's degree with a major in education. He will be expected some time during the academic year to give evidence of his progress by the preparation of an essay, the completion of a research, the delivery of a lecture, or by some similar method.

All stipends of Fellows are paid in ten equal installments, two installments being paid at the beginning of each half-year. The holder of a fellowship is required to pay all established fees. No Fellow is allowed to accept remunerative employment except by permission of the Dean, and the acceptance of any such employment, without such permission, shall operate to vacate the fellowship. In case of the failure of any Fellow to fulfil faithfully the obligations imposed upon him by the fellowship to which he has been appointed, he shall forfeit all privileges and emoluments conferred upon him by such fellowship, and the Faculties may at any time declare the fellowship vacant.

Applications for fellowships must be addressed to the Secretary of Teachers College, prior to March 1 preceding the academic year for which the appointment is desired, on blank forms which may be obtained from

The application must present evidence:

(a) Of an academic training of a liberal character, preferably with one or more testimonials from officers of educational institutions previously

(b) Of decided fitness for undertaking original research in the field of education, such as a written or printed example or record of professional work already performed; and

(c) Of upright character, such as a testimonial from a former instructor. The Grace H. Dodge Fellowship (open to women only), of the annual value of five hundred dollars, established in 1914 in memory of Miss Dodge,

is awarded by the Faculties of Teachers College. The educational standard required of applicants is the same as for other fellowships, but the holder may have the privilege of pursuing either graduate or professional courses in any department of the College.

The Ellen H. Richards Memorial Fellowship in Household Arts will be available through Teachers College for the academic year 1919–1920. This fellowship, which will be awarded by the Faculties under the general conditions governing the award of other fellowships and graduate scholarships within their control, has a stipend of four hundred dollars, representing the annual income of two hundred dollars of the Ellen H. Richards Memorial Fund, and two hundred dollars which will be assigned by Teachers College. In addition, the successful candidate will be allowed, for the year stated, free tuition in all courses conducted in Teachers College.

As soon as the awards are determined, a statement of the result is sent

to each applicant.

Graduate Scholarships

Eight or more graduate scholarships, each of the annual value of one hundred and fifty dollars, for the term of one year, are awarded on the same general conditions as the fellowships. They may be renewed for a second term of one year in case the holder gives evidence of superior ability. Teachers College Graduate Scholars are required to enrol themselves as candidates for a diploma and a higher degree with a major in education, and pursue a regular course of study leading thereto; and to perform such College duties, including proctoring in examinations, as may be assigned.

Stipends of scholars are paid in equal semi-annual installments, on the opening day of each half-year. Scholars are required to pay all established

fees.

Applications for scholarships should be addressed to the Secretary of Teachers College, prior to March 1 preceding the academic year for which the appointment is sought, on blank forms which may be had on application. An applicant for a fellowship who is unsuccessful may allow his original application to remain on file as an application for a scholarship.

As soon as the awards are determined, a statement of the result is sent

to each applicant.

Foreign Research Fund

Teachers College established in 1910 a Foreign Research Fund to aid competent students in investigating special phases of education in foreign countries. In general this fund of one thousand dollars annually will be divided among several students so as to pay the extra cost of traveling and residence abroad.

Recipients of grants will be required to submit the result of their inves-

tigations in a form suitable for publication.

Applications for grants from this fund should be made on blanks to be obtained from the Secretary of Teachers College and to be returned to him for consideration by the Faculties on or before December I annually. Awards will be announced on or before December 15.

Recipients of grants should be prepared to start for Europe by the first

of February, following.

Undergraduate and Special Scholarships

The following undergraduate and special scholarships are awarded annually. Applications should be made in the same manner as for graduate scholarships, on blank forms provided by the Secretary of the College, to be returned for consideration prior to March I preceding the academic year for which the appointment is sought.

I. The "Tileston Scholarship" (undergraduate), of the annual value of one hundred and twenty-five dollars, founded in 1891 by Mrs. Peter M. Bryson.

2. The Fine Arts Alumni Scholarship, contributed by the alumni of the departments of Fine Arts; awarded by the Dean on the recommendation

of the head of the department concerned.

3. The "Pond Scholarship" (undergraduate), of the annual value of seventy-five dollars, founded and endowed in 1895 by Mrs. Frank Porter.

4. The "Charlotte Louisa Williams Scholarship" (open only to women), of the annual value of one hundred and fifty dollars, founded and endowed in 1897 by Mrs. Peter M. Bryson and Miss Grace H. Dodge.

5. The "Earl Scholarship" (open only to men), of the annual value of one hundred and fifty dollars, founded and endowed in 1897.

6. The "Hoadley Scholarship," of the annual value of one hundred and

fifty dollars, founded and endowed in 1899.

7. The "Runyan Scholarship," established in 1910, from the income of a fund given in memory of Mary Duncan Runyan, professor of Kindergarten from 1897 to 1905.

8. The "Livingston Scholarships," from a voluntary contribution; awarded by the Dean to foreign students, preferably missionary workers.

9. The "Delta Sigma Alumnæ Scholarship," of the annual value of seventy-five dollars, given since 1910 by the Delta Sigma Alumnæ Association; awarded annually by the Dean.

10. The "Caroline Scholarship," in Domestic Science, of the annual value of two hundred and fifty dollars, founded and endowed in 1903 by

Miss Caroline Phelps Stokes.

II. Practical Arts Scholarships, from a fund of the annual value of one thousand dollars, awarded annually by the Faculty of Practical Arts.

- 12. The "Helen Hartley Jenkins Scholarship," of the annual value of two hundred and fifty dollars, given since 1910 by Mrs. Helen Hartley Jenkins; awarded annually by the Dean.
- 13. The "Army and Navy Scholarship," founded by the Society of the Daughters of the Cincinnati in 1906; awarded annually to the daughter of an officer of the regular army or navy of the United States, preferably of "Cincinnati" ancestry, upon the written nomination of the Society of the Daughters of the Cincinnati, attested by its seal and the signature of its President and Secretary. Provided that: In case this Society should fail to nominate a candidate on or before September 1, in any year, the Faculties shall have power to assign the scholarship to any properly qualified daughter of an officer of the regular army or navy of the United States. This Scholarship carries with it, besides free tuition in all or any of the courses offered by Teachers College, or by Columbia University in its behalf, an income of two hundred and eighty dollars.
- 14. The "Margaret Hoe Scholarship," of a value equal to the income of a fund of five thousand dollars, given by Mr. and Mrs. Richard M. Hoe; awarded annually by the Dean.

PRIZES

Prize of the Colonial Dames

A prize of fifty dollars in gold and a silver medal are awarded annually by the Society of Colonial Dames to that student of Teachers College who presents the best essay on a topic connected with the colonial history of America. Papers must be presented to the head of the Department of History on or before April 20. The topics are publicly announced several months in advance.

Prize of the United Daughters of the Confederacy

A prize of one hundred dollars is awarded annually by the United Daughters of the Confederacy to that student of Teachers College who presents the best essay on a topic connected with the activity of the South before or during the war between the States. Papers must be presented to the head of the Department of History on or before April 20. The topics are announced several months in advance.

Caroline Phelps Stokes Prize

A prize of forty dollars, to be known as the Caroline Phelps Stokes Prize, is awarded annually to that student who, having been regularly enrolled in Columbia College, or Barnard College, or Teachers College, as a candidate for an academic degree for not less than one academic year, shall be deemed to have written the best essay upon the Rights of Man, as the committee of selection shall determine.

COLLEGE LOAN FUNDS

Ruth Loan Fund

A fund known as the Ruth Loan Fund was established in 1896, to enable students in the later years of their courses to supplement means already at their command. Its advantages are usually open only to students who are already in residence. The amount loaned to any student in a single year averages seventy-five dollars and is never more than one hundred dollars. The student is required to give a note for the amount borrowed, payable at some definite time with interest at two per cent.

Applications should be made personally or in writing to the Controller

of Teachers College.

General Loan Fund

A General Loan Fund, established by the Trustees of the College in 1897, and augmented by the graduation gifts of the classes of 1906, 1908, 1910, 1911, 1912, 1913, 1914, 1916, and 1918, is administered in the same way as the Ruth Loan Fund.

Applications should be made personally or in writing to the Controller

of Teachers College.

The Mary Schenck Woolman Loan Fund

This loan fund was established in 1912 by the former students and colleagues of Mrs. Woolman, in recognition of her long service in Teachers College. It is open to students in residence in the School of Practical Arts, who must have temporary financial help and who intend subsequently to enter the Department of Household Arts Education, and to students in residence in the Department of Household Arts Education. The student is required to give a note for the amount, payable at some definite time, with interest at two per cent.

Applications should be made to the Controller of Teachers College.

Nursing and Health Loan Fund

The Nursing and Health Branch of the Teachers College Alumni Association has established a loan fund to be used for regularly matriculated students in the second year of the Nursing and Health course. The regulations specify that not more than two hundred dollars be loaned to any one student, that not more than four hundred dollars be loaned in any one year,

and that the loan be payable within a period of two years after leaving

Teachers College, with interest at two per cent.

This fund was supplemented in 1914 by a gift from the Nurses' Club of Teachers College, the awards from which are made to senior students on the basis of promise of professional ability.

Applications should be made to the Controller of Teachers College.

BUILDINGS AND EQUIPMENT

Teachers College is situated on Morningside Heights, north of Central Park and between Riverside and Morningside Parks, occupying the block bounded by 120th Street, Amsterdam Avenue, 121st Street and Broadway, opposite the central campus of the University. The site commands views of both the Hudson and the Harlem Rivers. St. Luke's Hospital, the Cathedral of St. John the Divine, the Art School of the National Academy of Design, the Institute of Musical Art, and the Union Theological Seminary are in the immediate vicinity. The College is accessible from all parts of the city by the Broadway Subway to the Columbia University Station at Broadway and 116th Street; by the Sixth or Ninth Avenue elevated railroad lines to 116th or 125th Street; or by the surface lines on Amsterdam Avenue and on Broadway. The main entrance of the College is numbered 525 West 120th Street. The cable address of the College is "Teacol."

The buildings—five in number—are connected by corridors so that they form practically one building. The Main Building, erected in 1894, fronting on 120th Street, is devoted to general business offices (main floor); the laboratories, offices, conference, lecture, and class-rooms of various departments of instruction (second and fourth floors); the Bryson Library with its connected rooms for reading and study (second and third floors); and science laboratories on the fourth floor. In a large room on the third floor is installed a laboratory of educational statistics, for the use of advanced students in education. The laboratory is fully equipped with modern calculating machines and statistical tables.

The Milbank Memorial Building, the gift of Mr. Joseph Milbank as a memorial to his parents, opened in September, 1897, contains the Memorial Chapel (first floor), and offices, laboratories, conference, lecture, and classrooms for a number of departments on the second, third, and fourth floors.

The Macy Manual Arts Building, given in 1896 by Mrs. Josiah Macy as a memorial to her husband, is equipped for the Departments of Fine Arts and Industrial Arts and contains a number of offices and large lecture rooms.

The Frederick Ferris Thompson Memorial Building, the gift of Mrs. Frederick F. Thompson, opened in 1904, adjoins the main building on the west, and contains, in addition to the offices, conference, laboratory, and lecture rooms of the Department of Physical Education, a large gymnasium and smaller exercise rooms, hand-ball courts, bowling alleys, shower-baths, and a swimming-pool for the women of the College and the pupils of the Horace Mann School.

The Household Arts Building, a gift of Miss Grace H. Dodge in memory of her mother, opened in 1909, adjoins the main building on the northeast and extends 150 feet along 121st Street, providing approximately an acre of floor space. The basement contains two laundry laboratories, and a laboratory for testing and experimental work. On the first floor are offices, lecture rooms, and the departmental library. The second floor has three large laboratories for instruction in Foods and Cookery, an experimental cooking laboratory, one dining-room, and necessary service rooms. third floor is devoted to Textiles and Clothing, and includes four large studios for garment-making, dressmaking, and allied courses. The laboratories of Household Chemistry, Physiological Chemistry and Nutrition are

on the fourth floor. The fifth floor has studios for Interior Decoration, Household Design, and Costume Design and Illustration, a Nutrition research laboratory, and a laboratory for Nursing and Health. A flat-roof area of 2,000 square feet, accessible by elevator, is used for open-air classes

of the Horace Mann Elementary School.

Adjoining the Thompson Building on the west is that of the Horace Mann School, the gift of Mr. and Mrs. V. Everit Macy, completed in 1901, and accommodating one thousand elementary and high-school pupils. It is a modern school building of the most advanced type, with an auditorium, a library, a gymnasium, a lunch-room, offices for the departments of administration and instruction, and about forty conference, class, and recitation rooms. The exercise field is at 246th Street.

The Horace Mann School for Boys, a gift of the trustees and friends of the College, was opened in the fall of 1914. It is situated at 246th Street, west of Broadway, upon a plot originally acquired as an exercise field. The building is of the best construction, and fully equipped. The large field affords ample opportunity for the necessary sports and exercises of such a school throughout the academic year. The principal's residence, con-

structed at the same time, is near the school.

The building given by Mr. and Mrs. James Speyer for the Experimental School of the College, completed in 1902, is on Lawrence Street near Amsterdam Avenue, a five minutes' walk north of the College. It contains offices, classrooms, a gymnasium, and laboratories for the accommodation

of a junior high school.

The Lincoln School, the new experimental school of Teachers College, was opened in the fall of 1917. It occupies the main building at 646 Park Avenue, and an annex at 56 East 67th Street. The main building is a modern fireproof structure, seven stories in height, which has been extensively remodeled to suit the purposes of The Lincoln School. The annex is connected with it by means of passageways, so that there is ready communication between the two buildings. Adequate playgrounds are provided near the school.

Whittier Hall, a ten-story fireproof residence for women students, erected by a group of friends of the College in 1901, is now College property, and is

fully described on page 117.

These special facilities of the College in buildings and equipment, representing an expenditure of more than four million dollars, are supplemented by the facilities of other parts of the University, and by the many intellectual, artistic, historic, economic, social and religious opportunities of the city. Students are allowed special privileges by many institutions such as the Metropolitan Museum of Art, the National Academy of Design, the Art Students' League, the New York Public Libraries, the American Museum of Natural History, the Botanical Gardens, the Zoological Park, and the Aquarium.

TEACHERS COLLEGE SCHOOLS

In order to supplement its instruction in educational aims, curricula and methods, and to cultivate professional skill in meeting actual problems, Teachers College has developed as an integral part of its work the Horace Mann School and the Horace Mann School for Boys for observation and experiment, and the Speyer School for practice and experiment. These schools have a total enrolment of more than two thousand pupils. In the fall of 1917 Teachers College added to its resources a third experimental school, known as The Lincoln School, which is conducted in co-operation with the General Education Board. Opportunity for observation in each of these schools and for discussion of the various problems which they present is open to all professional students in the College.

Horace Mann Schools

The main building of the Horace Mann School is adjacent to Teachers College. It includes the kindergarten, an elementary school of six years for boys and girls, and a high school of six years for girls. Two open-air school-rooms are also maintained on the roof of the Household Arts Building, thus affording opportunity for experiments in this new field of teaching. The Horace Mann School for Boys is a country day school located in its new building near Van Cortlandt Park. The girls' high school offers programs of study both in preparation for college and for general education. The program of the boys' school primarily serves the needs of those who intend to enter college.

The Horace Mann Schools are constantly experimenting with different methods of instruction and with new types of curricula, and while meeting the formal requirements for college entrance, are thoroughly progressive.

Speyer School

The Speyer School has been reorganized as an academic junior high school under the Board of Education of New York City in co-operation with Teachers College. It will continue to be a school for experimentation, the problems now undertaken relating to the organization, the course of study, and the methods of teaching in the junior high school.

The intention is to make Speyer School and Public School 43, to which it is annexed, the clearing house for all modifications of normal practice that are likely to improve the training of boys and girls for good citizenship. The two schools contain all grades from the kindergarten through the ninth.

A more detailed description of the Horace Mann and Speyer Schools and their work is given in several publications for sale by the College Bureau of Publications. For a list of the instructors in these schools, see pp. 16-20.

The Lincoln School

In The Lincoln School an attempt is being made to organize a curriculum which emphasizes the interests and activities of actual life—social, civic, industrial, physical, intellectual, and ethical—thus endeavoring to lead pupils to an appreciation of school work as organically connected with the interests of the home and community. Particular attention is directed to improvement of the ways and means of instruction and to the development of courses of instruction which are based upon the varied interests and activities of society. No subject-matter is included in the courses of study merely because of traditional requirements, or merely for formal disciplinary ends, since it is desired to experiment with the theory that the best disciplines are secured through the use of materials which are in themselves related to common thought, use, and ideals.

The Lincoln School began it's work on October 1, 1917. It now has an enrolment of 184 pupils, including boys and girls, distributed throughout the first ten grades. The classes are relatively small since it is desired that none shall exceed 20 pupils, in order that the attention of teachers may be directed primarily to constructive work rather than to the heavier burdens of teaching which are involved in caring for larger numbers of pupils. Constructive experimentation is being carried out in the high school in the sciences, mathematics, history and civics, English, modern languages, and industrial arts. In the elementary school similar experiments are being conducted in the reorganization of instruction in the fundamental subjects of reading, history, writing, spelling, and arithmetic.

of reading, history, writing, spelling, and arithmetic.

The school is organized upon the 6-3-3 plan. The teachers of special subjects in the junior and senior high school assist in the organization of the corresponding work in the grades.

For list of instructors, see p. 21.

LIBRARIES

The Bryson Library of Teachers College

This library was founded by the late Mrs. Peter M. Bryson as a memorial to her husband. Including the two branch libraries in the Horace Mann and Practical Arts Schools, it contains 66,050 especially selected volumes, comprising works in English, French, German, and Latin on the history and philosophy of education, the theory and practice of teaching, school organization and administration, psychology, child study, sociology, fine arts, and physical, vocational, religious, and rural education; several thousand reports of American and foreign state and city educational systems and special schools; a collection of 8,000 American text-books for all school grades; a collection of the text-books on all subjects taught in the schools of France and Germany, and many from other countries; and a collection of 700 volumes representing the historical development of books for children.

Although the main purpose of the library is to afford to students of education opportunities for research and advanced professional study, it also contains a selected list of general works on philosophy, history, music, literature, and science.

The Avery collection, presented and endowed by Mr. and Mrs. Samuel P. Avery as a memorial to their daughter, Ellen Walters Avery, consists of about 2,400 volumes on literature, hymnology, music bibliography, and natural history. Most of these books are illustrated. The books on naturestudy, together with those in the regular library, form one of the best working collections on the subject in the country.

The library serves also as a reading-room, and has on file over 340 of the leading French, German, English, and American periodicals, those bearing upon education being best represented. The annual additions to the library number about 3,000 volumes.

In addition to the collections described above, the Bryson Library has been since 1903 the repository from the main Library of the University of its entire collection of books bearing specifically upon the subject of education, a total of about 15,000 volumes.

The Reading Room of the School of Practical Arts is in the Household Arts Building. It contains a well-chosen technical library of over 8,000 bound volumes, on the subjects of industrial arts, including drawing, design, art industries; household arts, including nutrition, dietetics, practical cookery, textile economics, history of costume, sewing, dressmaking, and millinery, house design and decoration, household and institutional administration, hospital administration and nursing; social science; and sanitation and health.

The Library of Columbia University

The General Library of the University contains about 712,000 volumes, exclusive of unbound pamphlets and doctoral dissertations. Students of Teachers College have the usual privileges of this Library, open each week

day during the academic year from 8:30 a. m. to 10 p. m.

Connected with the stacks in which are stored the books relating especially to the departments of Philosophy, Literature and Philology, the Sociological and Economic Sciences, Public Law, and History, are special study rooms open to authorized readers. This arrangement is intended to give to advanced students and investigators in these fields the fullest opportunity to carry on their work by the use of quiet rooms in the immediate vicinity of the complete literature of their subjects. For further information consult the Readers' Manual and Library Rules.

The various departments of instruction have also special libraries in connection with their lecture-rooms and laboratories. The Avery Architectural Library, the Law Library, the Ella Weed Library of Barnard College, the Bryson Library of Teachers College, and the libraries of the College of Physicians and Surgeons and the College of Pharmacy, are all available to students of the University.

The Plimpton Library

Graduate students in Teachers College may, under reasonable restrictions, have access to the private library of George A. Plimpton, LL.D., for the purpose of investigating the history of education by means of early textbooks. Dr. Plimpton has the largest collection of early printed arithmetics that has ever been brought together, and a larger number of medieval manuscripts on the subject than can be found in any other private library. His collection is also very rich in other early mathematical works and treatises on education, and it is quite unequaled in early geographies, readers, and Latin, Greek, and English grammars and dictionaries, as well as in books on rhetoric, logic, reading, spelling, and penmanship. The library has already been of great assistance to a number of graduate students in education, and it is proposed by Dr. Plimpton to make it even more serviceable. A catalogue of its rare arithmetics has been prepared under the direction of Professor Smith. From time to time Dr. Plimpton has loaned certain of his rare works for purposes of exhibit.

BUREAU OF EDUCATIONAL SERVICE

MARION REX TRABUE, Ph.D., Assistant Professor of Education, Director Isabelle L. Pratt, Recorder

A Bureau of Educational Service has been organized at Teachers College for the purpose of serving school authorities, the alumni of Teachers College, and others interested in education.

To the alumni of Teachers College the Bureau will be glad to offer any assistance for their professional advancement. It is urged that each former student keep the Bureau informed of his changes in address and in educational work in order that the College may always have on hand the latest information about each of its alumni. The Bureau will also be glad to learn of progress in educational experimentation and measurement being made by former students; so far as circumstances permit the Bureau will serve as a central agency for information concerning educational matters. The Bureau will also assist local groups of alumni to form Teachers College Clubs and to promote other local alumni interests.

The work of the former Appointment Committee is now incorporated in the Bureau which will furnish to school and institutional authorities who are seeking to fill vacancies, information concerning properly qualified candidates selected from present or former students. Recommendations are made and information furnished only upon the request of the authorities concerned. The Bureau seeks to serve, without charge to either, the interests of both the students and the institutions that may be in need of such aid.

Any student now or formerly registered in the University is eligible to enrolment with the Bureau. Attention is called to the division of work between the Columbia University Appointment Committee and the Teachers College Bureau of Educational Service. The Columbia Appointment Committee (Mr. Levering Tyson, Secretary) accepts registration and makes recommendation for teaching positions in academic subjects in colleges or universities; also for positions in business, law, etc. The Bureau

of Educational Service of Teachers College accepts registration and makes recommendation for college and university positions in the teaching of education and in the field of practical arts; and for administrative, supervisory, and teaching positions in normal, industrial, secondary, and elementary schools and kindergartens; also in hospitals and similar institutions; that is to say, for any positions specific preparation for which is made in Teachers College.

Success in each of the specialized lines of educational work requires, in addition to thorough professional preparation, a high degree of native ability, personality, and adaptability. For men and women who combine these qualities in high degree with successful experience the demand exceeds the supply. The general distribution of demands may be inferred from the following table giving totals of positions filled by students as they have left the College for the past eighteen years (1900–1918) and the same distribution for the past year (1917–1918):

Summary of Appointment Reports, 1900 to 1918

College and university positions	1917–18 182	1900–18 1,528
training, instructors, and critics	109	1,081
Public school administration and supervision ¹	112	821
Secondary school teaching positions	190	2,726
Elementary school teaching positions	64	1,086
Kindergarten teaching positions	9	458
Household Arts, supervisors and teachers ²	319	2,630
Fine Arts, supervisors and teachers	36	470
Industrial Arts, supervisors and teachers	27	610
Physical Education, supervisors and teachers	27	281
Music, supervisors and teachers	8	108
Nursing and Health ³	27	357
Miscellaneous	214	1,099
Less names counted twice in the above tabulation .	1,324 308	13,255 2,083
	1,016	11,172

The Bureau of Educational Service renders assistance, wherever possible, to students who are obliged to defray part of their expenses while in college, by placing them in touch with such opportunities for part-time work as arise.

Communications should be addressed to the Director or to the Recorder of the Bureau of Educational Service, Teachers College.

LIVING ARRANGEMENTS

Residence Halls for Men

There are three residence halls for men on the University grounds—Hartley, Livingston, and Furnald Halls—with accommodations for approximately 820 students.

³ Includes administrative positions in hospital work.

¹ Includes superintendents and assistant superintendents of schools, principals and assistant principals of secondary, elementary, and industrial schools, and kindergartens.
² Includes supervisors and teachers of Domestic Science and Art, and appointments in Household Administration.

Detailed information concerning these halls, the facilities and cost, may be obtained from the office of the Superintendent of Buildings and Grounds, Columbia University.

The University Commons, in University Hall, provides board at reason-

able rates and also maintains a lunch room.

Whittier Hall

A hall of residence for the women students of Columbia University, known as Whittier Hall, erected in 1901 at an expense of over one million

dollars, was presented to Teachers College in 1908.

The Directors of the Hall and their assistants are all women familiar with the needs of college students. The general administration of the house is in the hands of the House Director. The Director of the Dining-room is a trained dietitian of broad experience. The Social Director of Teachers College lives in the Hall, and she and the Assistant Social Director, as housemothers, have supervision of the house life, the younger students, especially, being directly responsible to them. The Resident Nurse and her assistant, women of training and experience, have general charge of the physical welfare of the household, working in consultation with the Social Director, and under the advice of the College Physician.

The Hall adjoins Teachers College on the east. It is a fireproof building, ten stories in height, especially designed and constructed for students' use. Every room is outside, and the arrangement is such that rooms may be rented singly or in suites of two or three. There is also a limited number of suites consisting of two rooms and private bath. The building is heated by steam and lighted by electricity. There is complete telephone and elevator service, and a system of shower, needle, and tub baths on each floor. The public parlors and reception rooms are on the main floor. The diningrooms and restaurants are on the ninth floor and command extensive views

over the city and the North and East Rivers.

The rates for single furnished rooms in Whittier Hall are from \$340 upward, according to location. The rate for the majority of rooms is \$380. These rates include room rental for the academic year, holidays included, beginning before dinner on the day preceding the first day of registration in September and closing after breakfast on the day following commencement in June (see Calendar at the end of this Announcement) and also table board and plain laundry for one person during this period, except in the Christmas and Easter holidays. Payment is required in installments, viz., three-eighths on entrance, one-fourth on the first day of December, one-fourth on the first of February, and one-eighth on the first of April. No deduction is made for failure to occupy a room at the beginning or the end of the year, or for occasional absences, but in case a person is excluded from the Hall, or is obliged to leave on account of illness, rental will be charged only for the period of occupancy, at monthly rates.

Arrangements may be made, if desired, for board and laundry during the

several vacations.

A deposit of \$10 is required of each applicant, and is retained until the end of the academic year, when it is returned less the amount assessed for

unusual damage to room or furniture.

A descriptive circular with diagrams will be sent to any address on application to the House Director of Whittier Hall, 1230 Amsterdam Avenue, New York City, or to the Controller of Teachers College.

Residence Outside the Halls

Information and advice concerning desirable rooms and boarding places for both men and women may be obtained from the Assistant Social Director of Teachers College. Experience proves that personal inspection is necessary to suit individual tastes, and students are therefore advised not to complete arrangements until they arrive in New York City. If necessary, temporary arrangements can easily be made at that time until

final choice has been determined.

Many students effect a material reduction in the cost of living by uniting in small groups for light housekeeping. Unfurnished apartments of from five to seven rooms in houses without elevators may be rented from \$55 a month upwards, and apartments of four rooms from \$45 a month up. Apartments furnished for housekeeping are occasionally available at proportionately higher rates. Kitchen privileges are frequently given with rooms offered for rent in the vicinity. Furniture for housekeeping purposes can be purchased at favorable rates, and older students are assisted to form themselves into groups and reduce their expenses in this way. All women students under twenty-five years of age who are not living at home are required to live in Whittier Hall or obtain permission of the Social Director for living elsewhere. Such students will not be allowed to complete their registration until their proposed living arrangements have been approved by the Social Director, whose signature must be obtained. In general, the younger students are not expected to take rooms in places where no reception room is provided for their guests.

Students are warned that it is unsafe to engage rooms offered by unauthorized persons, and are urged to obtain the approval of the Assistant

Social Director of the College in every instance.

The Women's Faculty Club of Columbia University

The Women's Faculty Club of the University has rented three apartments in the Lowell, one to serve the social purposes of the Club, the other two to furnish rooms and meals to a limited number of members. The Club admits graduate women students to associate membership on payment of \$5.00, which is half the regular annual dues. Membership entitles the graduate student to all the social privileges of the Club—use of tea-rooms, reading-room, etc.—and gives her the privilege of living in the Club if a room is available. Voting privileges, however, are not extended to associate members. Rates for rooms vary from \$5.00 per week to \$7.00. Meals are \$7.50 per week. Graduate students who desire to join the Club will be assured of a cordial welcome from the faculty members. Application for rooms should be made well in advance to the Chairman of the House Committee.

STUDENT WELFARE

A Welfare Committee of seven faculty members, appointed by the Dean from the various departments of the College, has as its business the consideration of problems of student welfare other than those dealt with by the Committee on Instruction. The Social Director of the College and her assistants, working in close conjunction with this committee and with the College physicians, have charge especially of the women students in all matters outside their academic work, and the direction of their social life and welfare. One of these assistants maintains the directory of rooms and board for women living outside the residence hall; another, known as the College Visitor, keeps in friendly touch with this group, and advises them in times of difficulty; and one bears a similar relation to students resident in the Hall, the younger students there being directly under her care. In cases of emergency, students are expected to consult one of these officers immediately.

Medical Attendance

The Teachers College physician has direct supervision of all matters affecting the health of the Teachers College student body. All cases of

communicable disease in homes of students are required to be reported promptly to him. The Teachers College physician and the assistant physicians, one of whom is a woman, give professional advice without charge to students who consult them in their offices in the Thompson Building.

STUDENTS' EXPENSES

Statement Based on Students' Estimates of Average Total for the Academic Year, including Winter and Spring Sessions

	Low	Liberal
University fee	\$10	\$10
Tuition fee (ordinarily 30 to 36 points at \$6)	180	216
Books and stationery	20	40
Incidentals	60	150
Room (38 weeks)	133	228
Board (35 weeks, vacations not included)	210	280
Laundry	38	57
Total	\$651	\$981

See also rates for Whittier Hall on page 117. Students of Textiles and Clothing should add to this estimate an expenditure for materials, varying according to the courses taken, as stated in the description of each course. A fair average total is \$20 yearly.

STUDENT ORGANIZATIONS

Student self-government is maintained in Teachers College through the Students' Executive Council, made up of thirteen members, four from the School of Education, six from the School of Practical Arts, including the president of the Whittier Hall Student Government Association which is responsible to the Council, and three from the Faculty. This Council meets regularly for the consideration and control of matters affecting the

entire student body.

The professional and social life of both Schools of Teachers College is further promoted by numerous student organizations, such as the Administration, Secondary, Elementary, and Kindergarten Clubs; the Household Arts, Vocational, Rural, Advisers', and Women's Discussion Clubs; the Music, Nurses', and Physical Education Clubs; the Athletic and Dramatic Associations; the Red Cross Committee; the Young Men's and Young Women's Christian Associations, the Catholic Club, and the Jewish Forum. The religious groups are affiliated in the Federation of Religious Organizations.

Club rooms for the women students of the College were established in September, 1917, under the name of The Women's Club of Teachers College. An entire apartment was secured near the College, and a resident secretary placed in charge. Tea is served every afternoon to members and their friends, and the club serves in many ways as a neighborhood center

for the students living outside the residence halls.

There are, furthermore, several other student organizations, such as the British Empire, Cosmopolitan, Christian Science, Women's Graduate, and Chinese Students' Clubs, belonging to the University as a whole, and therefore open to students in Teachers College. Another organization called The Columbia Dames brings together the wives and mothers of University students.

The advantages of Earl Hall, the building devoted to the religious, philanthropic, and social activities of the University, and the services of

its Secretary, are also available for students of Teachers College. Students Hall, recently erected on the Barnard College Campus, is open as a social center to all women of the University.

TEACHERS COLLEGE RELIGIOUS SERVICES

Teachers College as a non-sectarian institution welcomes all creeds to its classes, and invites every student to join in its religious services, held at noon in Milbank Memorial Chapel. The weekly program, arranged by a joint committee of Faculty members and students appointed by the Dean, consists of two regular Chapel services Wednesday and Friday noons, at which speakers both from the Faculty and from without the College give brief talks. The music with special anthems by the College choir is in charge of the Music Department.

On Thursday occur the weekly meetings of the various religious organizations. These offer opportunity to hear prominent leaders of religious

thought and to take part in the discussion of special topics.

Teachers College students are welcomed at the services held in St. Paul's Chapel every week day during the academic year, except on Wednesdays and Saturdays, at noon. The Sunday service is held at four o'clock. Earl Hall, the home of the religious, philanthropic, and social organizations and interests of the University, is open daily to all students.

LECTURES AND RECITALS

In the course of the college year many public lectures and recitals, open without charge to students and their friends, are given before the student public, under the general auspices of the University, the College, or of the various student organizations.

TEACHERS COLLEGE PUBLICATIONS

Committee on Publications: Dean Russell (Editor), Professors Upton (Chairman and Associate Editor), Lodge, Thorndike, McFarlane, and Bagley.

A descriptive price list of all publications may be obtained by addressing the Bureau of Publications, Teachers College.

The Teachers College Record

The TEACHERS COLLEGE RECORD is a serial publication issued by Teachers College, under the editorship of the Dean, for the purpose of presenting to the alumni and other students of education and to the public generally the views of the history and principles of education, of educational administration, and of the theory and practice of teaching as advocated and followed by Teachers College and its schools of observation and practice.

Up to January, 1915, each number of the Record treated a specific problem in the work of the kindergarten, elementary school, high school, or some department of college work. The topics presented have included the following: the history, organization and administration of Teachers College; the management of schools of observation and practice; the selection and arrangement of materials for curricula; outlines of courses of study in various subjects; the aims, methods, and results of instruction in the various school grades; syllabi of collegiate courses; and studies in the history and philosophy of education, school economy, and the theory and practice of teaching worked out in the College and its elementary and secondary schools.

Since January, 1915, the Record has been considerably enlarged so as to include in addition to monographs of the kind mentioned above numerous shorter articles covering each of the departments of educational specialization. There is also given news of the College, its departmental activities, and the alumni. The HOUSEHOLD ARTS REVIEW has been incorporated.

There are five numbers each year: January, March, May, September, and November. Subscription is \$1.50 per year, 40 cents per number;

special discounts on orders for five or more copies.

Nineteen volumes (1900–1918) have been published. A complete list of contents may be obtained from the Bureau of Publications.

Columbia University Contributions to Education— Teachers College Series

This series, established in 1905, continues the educational issues of the Columbia University Contributions to Philosophy, Psychology, and Education, and presents the results of research by officers or advanced students of the College in the history and philosophy of education, in educational psychology, in kindergarten, elementary, and secondary education, in educational administration, and in related fields. Ninety-nine volumes have been issued in this series.

Teachers College Lectures on the Religious Life

Three volumes have been published in this series.

Technical Education Bulletins

A series of pamphlets dealing with educational and technical problems in the field of the School of Practical Arts.

Other Educational Books and Pamphlets

The Bureau of Publications has published many text-books, reprints, monographs, bibliographies, and syllabi of courses other than the above series. A complete catalogue will be sent upon request.

DEGREES, DIPLOMAS, AND CERTIFICATES CONFERRED

A full list of names of graduates who received 1917–18 Columbia University degrees through Teachers College and Teachers College diplomas is included in the "Register of Teachers College Students, 1918–19," which will be sent on application to the Secretary of the College.

Summary of Degrees, Diplomas, and Certificates Conferred 1917-18

	13	,T1.	-10													
Degrees:																
Doctor of Philosophy																IQ
Master of Arts														-		306
Master of Science		•		•	٠.	•	•		•	•	•	•		•	•	-
Bachelor of Science		•		•		•	•	٠.	•	•	•	•		•	•	4
bachelor of Science		•		•		•	•		•	•	•	•	•	•	•	345
Teachers College Diplomas:																
	T .		c 101	.,												
Awarded in connection with the	Doct	or o	į PI	1110	sop	hу	de	gree								_7
Awarded in connection with the	Mast	er o	f A:	rts	deg	ree										187
Awarded in connection with the	Bach	elor	of	Scie	ence	e de	gre	ee								226
Teachers College Certificates .																14
Total degrees and diplomas awarded																1,108
Total degrees and diplomas awarded	• • •	•		•		•	•		•	•	•	•	• •	•	•	1,108
Distribution of the Professional	Diplo	mas	:													
																-
Instructor in Education .		•				•	•		•		٠					7
Teacher of Education		•														9
Superintendent of Schools																42
Superintendent of Schools Principal of High Schools																10
Supervisor in Normal Scho	ols .															4
Teacher in Elementary Sch	ools .															Í
Supervisor of Elementary S	chools					-										16
Supervisor of Primary Scho	ole	•	٠.	•	•	•	•	٠.	•	•	•	•	•		•	2
Supervisor of Primary School Teacher in Primary School		•	٠.	•		•	•		•	•	•	•	•		•	ī
Teacher in Vindergertens		•		•		•	•		•	•	•	•	• •	•	•	
Teacher in Kindergartens		•	٠.	•		•	•		•			•			•	4 8 6
Supervisor of Kindergarten Adviser to Women and Gir	s	•		•					•	٠						8
Adviser to Women and Gir	ls															
Psychologist																8
Supervisor of Religious Edu	ıcatioı	1														7
Supervisor of Religious Education Teacher of Religious Education	tion .															I
Supervisor of Foreign Scho	ols .															2
Supervisor of Special Class	28	Ţ.		Ţ.		Ť	Ť		Ĭ	Ĭ						3
Supervisor of Rural Educat	ion	•	٠.	•	٠.	•	•	: :		•	•	•	•		•	I
Teacher of Rural Education		•	٠.				•		•	•	•	•	•	•		Î
Teacher of Biology		•		•		٠	•		•	•	•	•	•	•	•	
Teacher of Brodleh		•	٠.	•	٠.	•	•		٠	•		•	•	•	•	3
Teacher of English		•		•		•	•					•	•	•	•	25
Supervisor of English										٠		•		•		4
Teacher of Fine Arts										٠						17
Supervisor of Fine Arts .																2
Teacher of French																3
Teacher of Geography																I
Teacher of German Teacher of Spanish																2
Teacher of Spanish																I
Teacher of History Supervisor of History		•		•								•				9
Supervisor of History		•		•		•	•		:	•	•	•	•			I
Toocher of Household Arts		•		•		•	•		•	•	•	•	•	•		118
Supervisor of Household Arts		•	٠.	•			•		•	•	•	•	•	•	•	14
							•		•	•	•	•	•	•		
Dietitian							•		٠	•		•		•		3
House Director									٠	٠						2
Teacher of Industrial Arts																7
Supervisor of Industrial Ar	ts															9
Director of Industrial Arts	and V	oca	tion	ıal l	Edu	ıcat	tioi	ı .								8
Teacher of Latin																5
Teacher of Mathematics .																9
Supervisor of Mathematics		•								•	i.	Ť				4
													•			2
Teacher of School Music . Supervisor of School Music		•		•		•	•		•	•	•	•	•	• •	•	3
Supervisor of School Music Teacher of Hygiene and Ph	ioci	ria.		+i'							•		•	• •		
reacher of Hygiene and Pr	ysical	Ed	uca	LIOI							•		•	•		24
Supervisor of Hygiene and																3
Supervisor of Play and Pla	ygrour	ids														
Teacher of Scouting																2
Teacher of Scouting Teacher of Physical Science																1
Supervisor of Public Health	Nurs	ing														I
Public Health Nurse																I
Public Health Nurse Superintendent of Nurses a	nd Pri	inci	pal	of 7	ra'	inir	12 5	Sch	001	S						2
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* Includes duplicate count, 2 students candidates for more than one diploma.

STUDENTS, 1918-19

A full list of students registered in 1918–19 will be sent on application to the Secretary of Teachers College.

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I.	Graduate students:	
	Candidates for the degrees Doctor of Philosophy, Master of Arts, Master of Science, and the Teachers College diploma, major in:	
	Administration of Education	76
	Educational Sociology	12
	Elementary Education	4 I
	History of Education	5
		17
	Philosophy of Education	10
		34
	Rural Education	46
	Secondary Education	7 27
	Vocational Education	~ /
	Biology	F4
		50
	Geography	I
		30
	Latin	4
		34
		16 18
		18 76
		23
	Industrial Arts	12
	Music	I
	Nursing and Health	6
	Physical Education	ΙI
		13
	Total	00
П.	Undergraduate students:	
	Candidates for the degree of Bachelor of Science and the Teachers College	
	Diploma:	
	Unclassified in Education	04
	Seniors in Practical Arts	51 62
		32
		30
		84
	1,6	63
II.	Summary:	
	Total matriculated students in Teachers College	62
	Additional matriculated students both schools, Summer Session, 1918 . 1,4	
	Matriculated students from other parts of the University 2	81
	Total matriculated students, Teachers College, from July 1, 1918 4,1	12

(In addition to the above there are 1,228 students in the Horace Mann Schools, 625 extension students in the School of Practical Arts, and 1,995 non-matriculated students in the Summer Session of 1918.)

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	Teaching Laboratory Physics in Sec. Schools. Good	
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1.10 p. m.

This hour on Tuesday is reserved for general University meetings at which the attendance of all students is expected.

2.10 p. m.
Education Page 71-72 —(Eng.) Nineteenth Century Writers. BAKER. HILL. Tu. Th. 73 225-226 —History of Education in United States. Monroe. Tu. Th. 42 251A-252A—Psychology of Childhood. WHITLEY. (I) Tu. Th. 48 283A-284A—Teaching Secondary Academic Subjects. Tu. Th. 68 425-426 —Practicum. History of Education in United States. Monroe. Tu. Th. 44 461 —Supervision of Religious Instruction. Coe. Tu. Th. 86 553-554 —Seminar. Educational Psychology. THORNDIKE. Th. (Meets 2-4) 50
3.10 p. m.
Education 58 —Study of Froebelian Lit. and Materials. BURKE. BIRCH. Tu. Th
4.10 p. m.
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5.10 p. m.
Education 143-144 203-204 —Indus. Arts for the Elem. Grades. PATRICK. (II) Tu. Th. (Meets 4.10-6) 64 —Methods and Results of School Surveys. STRAYER. ENGELHARDT. EVENDEN. Tu. (Meets 4.10-6)
7.30–9.20 p. m.
Education Page 295-296 —Vocational Education. SNEDDEN. DEAN. Tu

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103	—Materials Leading to the Fine Arts. Brown	6,
108	—Teaching English to Foreigners. DILLER	
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	A-School Surveys. Trabue. Evenden	
203C-204	4C-Ed. and Reconstruction in Europe. KANDEL	
211E	-Teaching and Supervision of Arithmetic in Elem. and Junior High	
	Schools. Upton	8
212F	—Teaching of Geography in the Elem. Grades. McFarlane	
215	—Methods of Teaching in Special Classes. FARRELL	4
216	—Supervision of Special Classes. Farrell	5
251-252	-Educational Psychology. GATES	4
253-254	-Psychology of Exceptional Children. Hollingworth. (I)	4
282	-Conduct of the Recitation in Secondary Schools. STEVENS	6
285	-Improvement of Instruction in Sec. Schools. Kelley	6
286	-Curricula and Courses of Study. Kelley	6
321A-322	A—Teaching Physiography in High Schools. LEHNERTS	7.
327-328	—Teaching Foreign Languages in Sec. Schools. BAGSTER-COLLINS	
	B-Measurement and Experimentation in Elem. Ed. McCall	5
413-414	-Supervision in the Elem. School. DAY	
421-422	-History of Education. REISNER	
493	—Sociological Foundations of Curricula. SNEDDEN	
494	—Problems of Curricula. SNEDDEN	4
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109-110	-Literature in the Primary School. MOORE	6.
159-160	—Teaching Applied Mathematics. Breckenridge	8
187-188	-Hygiene of Childhood and Adolescence, including Sex-education. Wood.	
	(Meets 11-11.50 only)	6
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201-202	-Principles of Educational Administration. STRAYER. ENGELHARDT.	
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288A	—Administration Problems of the High School. Johnson	69
297-298	-Vocational Guidance. Weaver. Snedden. Dean. Bonser	8,
308C	—Practicum. Teaching English in Sec. Schools. Abbott	7:
317-318	—Teaching French in Sec. Schools. MÉRAS	7:
397-398	—Practicum in Physical Science. Woodhull	
31-32	—(Math.) Industrial Mathematics. Breckenridge	7
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ACADEMIC CALENDAR 1919-1920

1919

July 7-Monday. Twentieth Summer Session begins.

Aug. 1—Friday. Last day for filing applications for the Master's degree to be conferred in October.3

Aug. 15-Friday. Summer Session ends.

Sept. 15—Monday. Entrance examinations begin.

Sept. 17—Wednesday. Registration (including the payment of fees) begins. Teachers College deficiency examinations.

Sept. 23—Tuesday. Registration ceases for undergraduate students previously matriculated.*

Sept. 24—Wednesday. Winter Session, 166th year, begins. Registration ceases for undergraduate students not previously matriculated.* Fellows and Scholars report to the office of the Dean of Teachers College.

Sept. 27—Saturday. Registration ceases for graduate students. The privilege of later registration may be granted, up to October 18, on payment of a fee of \$5.

Oct. I—Wednesday. Last day for filing applications for Bachelor's degree to be conferred in October.* Last day for filing essay for the Master's degree to be conferred in October.

Oct. 4—Saturday. Last day for changes in undergraduate programs.

Oct. 18—Saturday. Last day for receiving late applications for registration for full credit. Last day for making changes in programs of graduate students.

Nov. 4—Tuesday. Election day, holiday.

Nov. 26—Wednesday. Thanksgiving service in St. Paul's Chapel.

Nov. 27-Thursday, to

Nov. 29—Saturday,

inclusive. Thanksgiving holidays.

Dec. I-Monday. Last day for filing applications for the Master's degree to be conferred in February.*

Dec. 21—Sunday, to

1920

3—Saturday, lan.

inclusive. Christmas holidays.

Jan. 15—Thursday. Mid-year entrance examinations begin.

Jan. 21—Wednesday. Mid-year examinations begin.

Jan. 31-Saturday. Registration for Spring Session (including the payment of fees) begins.

2-Monday. Last day for filing applications for Bachelor's degree Feb. to be conferred in February."

Feb. 3—Tuesday, Winter Session ends. Registration ceases for students entering Spring Session.* Last day for filing essay for the Master's degree to be conferred

in February.

^{*}The privilege of later application or registration may be granted on payment of a fee of \$5.

Feb. 4—Wednesday. **Spring Session begins.** University service in St. Paul's Chapel. Fellows and Scholars report to the Dean of Teachers College.

Feb. 14—Saturday. Last day for making changes in undergraduate programs.

Feb. 20-Friday and

Feb. 21—Saturday. Teachers College Alumni Conferences.

Feb. 23-Monday. Washington's Birthday, holiday.

Feb. 28—Saturday. Last day for receiving late applications for registration for full credit. Last day for making changes in programs of graduate students. Teachers College deficiency examinations.

Mar. I—Monday. Last day for filing applications for Fellowships and Scholarships. Last day for filing applications for the Master's degree to be conferred in June.*

April I—Thursday. Last day for filing applications for examination for the degree of Doctor of Philosophy to be conferred in June.

April I—Thursday, to

April 5-Monday,

inclusive. Easter holidays.

April 13—Tuesday. Last day for filing applications for Bachelor's degree to be conferred in June.*

April 26—Monday, to

May 1-Saturday, 12 M.,

inclusive. Undergraduate students in the School of Practical Arts file choice of studies for the following year.

May 13—Thursday, to

May 15-Saturday,

inclusive. Preliminary examinations for candidacy for the degree of Doctor of Philosophy.

May 17—Monday. Final examinations begin.

May 19—Wednesday. Last day for filing essay for the Master's degree to be conferred in June.

May 30-Sunday. Baccalaureate Service.

May 31—Monday. Memorial Day, holiday.

June 2—Wednesday. Commencement Day.

June 9—Wednesday. Spring Session ends.

June 14—Monday. Entrance examinations begin.
July 6—Tuesday. Twenty-first Summer Session begins.

Aug. 2—Monday. Last day for filing applications for the Master's degree

Aug. 2—Monday. Last day for filing applications for the Master's degree to be conferred in October.*

Aug. 13—Friday. Twenty-first Summer Session ends.

Sept. 13—Monday. Entrance examinations begin.

Sept. 15—Wednesday. Registration (including the payment of fees) begins.

Sept. 21—Tuesday. Registration ceases for undergraduate students previously matriculated.*

Sept. 22—Wednesday. Winter Session, 167th year, begins.

^{*}The privilege of later applications or registration may be granted on payment of a fee of \$5.

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TEACHERS COLLEGE BUILDINGS, SOUTHERN FRONT Household Arts Building

Milbank, Macy and Main Buildings

Thompson Building

Horace Mann School

Whittier Hall (Dormitory)

(Speyer School, Horace Mann High School for Boys, and The Lincoln School are not shown)



Columbia University in the City of New York

TEACHERS COLLEGE

SCHOOL OF PRACTICAL ARTS ANNOUNCEMENT

1919-1920

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New York City

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James Earl Russell Dean and Barnard Professor of Education A.B., Cornell, 1887; Ph.D., Leipzig, 1894; LL.D., Dickinson, 1903; Colorado, 1905; McGill, 1909

THOMAS DENISON WOOD Professor of Physical Education A.B., Oberlin, 1888; A.M., 1891; M.D., Columbia, 1891

WILLIAM JOHN GIES Professor of Biological Chemistry B.S., Pennsylvania College, 1893; M.S., 1896; Sc.D., 1914; Ph.B., Yale, 1894; Ph.D., 1807

MARY ADELAIDE NUTTING Professor of Nursing and Health Diploma, Johns Hopkins Hospital Training School for Nurses, 1891

CHARLES T. McFarlane Controller and Professor of Geography B.Pd., New York State Normal College, 1894; M.Pd., Michigan State Normal College, 1901; D.Pd., New York State College for Teachers, 1904

¹ CLIFFORD BREWSTER UPTON Secretary and Associate Professor of Mathematics

A.B., Michigan, 1902; A.M., Columbia, 1907

MAY B. VAN ARSDALE Associate Professor of Household Arts B.S., Columbia, 1905

² Anna M. Cooley . . . Associate Professor of Household Arts Education B.S., Columbia, 1903

JESSE FEIRING WILLIAMS Associate Professor of Physical Education A.B., Oberlin, 1909; M.D., Columbia, 1915

WILLYSTINE GOODSELL Assistant Professor of Education B.S., Columbia, 1905; A.M., 1906; Ph.D., 1910

Jane Fales Assistant Professor of Household Arts B.S., Columbia, 1907

AZUBAH JULIA LATHAM Assistant Professor of Speech A.B., Boston, 1888; diploma, School of Expression, Boston, 1890

¹Absent on leave for four months, 1919-20 ²Absent on leave, Spring Session, 1919-20

ALON BEMENT
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¹ ALLAN ABBOTT
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B.S., Columbia, 1919; student, Paris, 1913–14; exhibitor in Salon, 1914
ELIZABETH C. COOK
Faculty of Education
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A.B., Dickinson, 1885; A.M., 1889; Litt.D., 1908; A.M., Columbia, 1900
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¹ Absent on leave, Winter Session, 1919–20 * Died, March 27, 1919

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A.B., Columbia, 1867; A.M., 1871; Ph.D., Rostock, 1871

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CHARLES T. McFarlane Controller and Professor of Geography B.Pd., New York State Normal College, 1894; M.Pd., Michigan State Normal College, 1901; D.Pd., New York State College for Teachers, 1904

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CHARLES HUBERT FARNSWORTH Associate Professor of Music Student of music, Boston and Worcester; student of school music in England, 1894; France and Germany, 1909

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- Franklin W. Johnson Associate Professor of Education A.B., Colby, 1891; A.M., 1894
- VIRGIL PRETTYMAN Principal of Horace Mann School for Boys, with rank of Assistant Professor A.B., Dickinson, 1892; A.M., 1895; Pd.D., 1905
- HENRY ALFORD RUGER . . Assistant Professor of Educational Psychology A.B., Beloit, 1895; A.M., Chicago, 1905; Ph.D., Columbia, 1910
- ROMIETT STEVENS Assistant Professor of Secondary Education B.S., Columbia, 1907; A.M., 1908; Ph.D., 1912
- Albert Amédée Méras Assistant Professor of French A.B., College of the City of New York, 1900; A.M., New York University, 1904; Ph.D., 1908
- TRUMAN L. KELLEY Assistant Professor of Education A.B., University of Illinois, 1909; A.M., 1911; Ph.D., Columbia, 1914
- WILLIAM ARTHUR MADDOX Assistant Professor of Education A.B., William and Mary, 1904; A.M., Columbia, 1911; Ph.D., 1918
- WILLIAM ANDERSON MCCALL Assistant Professor of Education A.B., Lincoln Memorial University, 1913; A.M., Columbia, 1914; Ph.D., 1916
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- LETA S. HOLLINGWORTH Assistant Professor of Education A.B., Nebraska, 1906; A.M., Columbia, 1913; Ph.D., 1916
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 GEORGE ALBERT COE . Professor of Religious Education and Psychology,
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A.B., University of Rochester, 1884; A.M., 1888; LL.D., 1909; S.T.B., Boston, 1887; Ph.D., 1891

¹ Absent on leave for four months, 1919-20 ² Absent on leave, Spring Session, 1919-20

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Instructors

Louise S. Atkinson B.S., Columbia, 1912		•	٠	٠	٠	Instructor in Kindergarten Education
	_					and the second s

Matthew Gruenberg Bach Instructor in German A.B., Trinity, 1910; A.M., Columbia, 1911

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HARRIET THOMPSON BARTO Instructor in Household Arts

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BERTHA E. SHAPLEIGH Instructor in Household Arts Diploma, Boston Cooking School, 1896
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SALLIE B. TANNAHILL Instructor in Fine Arts B.S., Columbia, 1915
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CHARLES BABCOCK UPJOHN Instructor in Fine Arts Pupil of Olin L. Warner and Karl Bitter
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Diploma, Teachers College, 1912 RUTH WILMOT Instructor in Household Arts
Diploma, Teachers College, 1907 BERNADINE MEYER YUNCK Instructor in Physical Education
Diploma, Teachers College, 1912

Lecturers

Lecturers
EVA ALLEN ALBERTI Lecturer in Physical Education A.M., Alfred University
S. Josephine Baker Lecturer in Nursing and Health M.D., Woman's Medical College of the New York Infirmary, 1898; D.P.H., New York University, 1917
Anna Barrows Lecturer in Household Arts Diploma, Boston Cooking School, 1886
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ELIZABETH E. FARRELL Lecturer in Educational Psychology B.S., New York University, 1906
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CLEMENT HEATON Lecturer in Fine Arts Student of Burlison and Grylls, London; student of Bodley and Garner, London
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EDWARD M. LEHNERTS Lecturer in Geography B.S., University of Pennsylvania, 1902; A.M., University of Minnesota, 1908
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Frank C. Panuska Lecturer in Industrial Arts B.S., Columbia, 1918
MAY KIRK SCRIPTURE
WILLIAM L. SOMERSET Lecturer in Nursing and Health A.B., Wesleyan, 1881; A.M., 1884; M.D., Columbia, 1892
HENRY W. THURSTON Lecturer in Nursing and Health A.B., Dartmouth College, 1886; Ph.D., Columbia, 1918
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LILLIAN D. WALD Lecturer in Nursing and Health Graduate, New York Hospital Training School for Nurses; LL.D., Mount Holyoke, 1912
CHARLES WARDLAW Lecturer in Physical Education A.B., University of North Carolina, 1906
ELI W. WEAVER Lecturer in Vocational Guidance A.M., New York University, 1904
MAY JOSEPHINE WIETHAN Lecturer in Music Paris, 1906-07; A.C.M. (Honorable Associate of the College of Musicians), 1907; Royal College of Music, London, 1907-08
CHARLES-EDWARD A. WINSLOW Lecturer in Public Health B.S., Massachusetts Institute of Technology, 1898; M.S., 1899; A.M., Yale, 1915; D.P.H., New York University, 1918
EMMA A. WINSLOW Lecturer in Household Arts B.S., Columbia, 1914; A.M., 1915

Lecturers and Instructors in Special and Extension Classes

Frances V. Hallock Instructor in Speech Student, Teachers College, 1915–16

CHRISTINE WARNER NELSON Instructor in Household Arts Student, Pratt Institute, 1910–12; Teachers College, 1914–16

CLARENCE HUDSON WHITE Instructor in Fine Arts
Honorary member, Camera Club, New York; corresponding member, Vienna Camera
Club; one of the founders of the Photo-secession

Assistants

C. ISABELLE ATKINSON Assistant to College Physician R.N., St. Luke's Hospital Training School for Nurses, 1902

WILLIAN WATSON BEAUMONT Assistant in Music and Speech B.M., Montana College, 1914; B.S., Columbia, 1918

BLANCHE LOUISE BIRCH Assistant in Kindergarten Education A.B., Wellesley, 1902; A.M., Columbia, 1918

LAURA MERRILL CHASSELL Assistant in Educational Psychology A.B., Cornell College, Iowa, 1912; M.Di., Iowa State Teachers College, 1913; A.M., Northwestern University, 1914

MARGARET HELEN COLE Assistant in Fine Arts B.S., Columbia, 1918

MARY WROE CURTIS Assistant in Household Arts Student, New York School of Applied Design for Women, 1902-03; Teachers College, 1905-07

Katherine Graves Assistant in Educational Psychology A.B., Vassar, 1917

MAY MARGARET HALLETT Assistant in Household Arts

NELL ZENIA HAWKINSON Assistant in Nursing and Health Diploma, Framingham Hospital Training School for Nurses, 1909; B.S., Columbia, 1919

HANNAH ELIZABETH HONEYWELL Assistant in Chemistry A.B., Mount Holyoke, 1910; A.M., Columbia, 1918

FLORENCE E. HOUSE Assistant in Industrial Arts Education B.S., Columbia, 1915; A.M., 1918

MORRIS MEISTER
J. CAYCE MORRISON Assistant in Secondary Education A.B., Valparaiso University, 1912; B.S., Columbia, 1915; A.M., Columbia, 1916
MARGARET RITCHIE Assistant in Chemistry B.S., Columbia, 1918
ETHEL M. ROBINSON Assistant in Kindergarten Education B.S., Columbia, 1917
MARY E. TURNBULL
MARGARET E. TUTTLE Assistant in Physical Education
ELEANOR F. WELLS

Lecturers Specially Appointed for War Service Courses

C M.D.
George Amsden, M.D
HARRIET BARNES, R.N Army Nurses
WILLIAM F. BENDER, M.D
H. B. Blackwell, M.D
ROBERT CAMPBELL
J. ALEXANDER CLARKE, M.D First Aid
GEORGE C. DIEKMAN, M.D
EMILY EDMUNDS
LIMA EDDENDORE Washing
LINA EPPENDORFF
A. P. Evans, M.D
ALBERT HECKMAN Fine Arts
MARY JOHNSTONE
CHARLES I. LAMBERT, M.D
NATHANIEL MILLS, M.D
WILLIAM K. MITTENDORF, M.D Ophthalmology
KATHERINE MURDOCK
WILLIAM E. RUSSELL, M.D
EMMA SCHRAMPF
Sumner Shailer, M.D
Frederick W. Smith, M.D Special Diseases
F. B. Weller, D.D.S
LIEUTENANT WIERZBRICKI, U.S.N
, , , , , , , , , , , , , , , , , , , ,

III. HORACE MANN SCHOOLS

Officers of Administration

JAMES E. RUSSELL, LL.D Dean of Teachers College Virgil Prettyman, D.Pd Principal of Horace Mann School for Boys
HENRY CARR PEARSON, A.B Principal of Horace Mann School
CHARLES W. HUNT, A.M Vice-Principal, Horace Mann School
CHARLOTTE GANO GARRISON, B.S Principal of Kindergarten
MARION ROOT PRATT
HAROLD BROWN KEYES, M.D
AMY LOGAN, B.S Assistant to Principal, Girls' High School
Anna Augusta Jones Secretary of Boys' High School
CONSTANCE F. BURR Secretary of Girls' High School
HELEN CRISSEY Secretary of Elementary School

OTTIOLIS OF INSTRUCTION
LILLIAN RANDEL
Teachers in Horace Mann High School
KATE STUART ANTHONY
GEORGIA FARRAND BACON
CHARLES MCCOY BAKER
HELEN BARTLETT BAKER
MARK B. BARRY
HELEN D. BAUM Assistant in Physical Education Diploma, Savage School of Physical Education, 1917
PAUL E. BELTING
VEVIA BLAIR
BELLE BOAS
ELIZABETH BRIGGS
FRANK ELBERT BROOKS
MARIE KARCHER BROOKS French Student, University of Geneva and University of Paris, 1901-02
MATTHEW BROWN
HARRIET GARTON CARTWRIGHT Music Diploma, Des Moines Musical College, 1897
JENNIE MAE CLARK
BERTHE MULLER COSTIKYAN French
École supérieure, Vevey, 1897–1901; student, Chicago, 1910–11; Columbia, 1913, 1916
JOHN HARVEY COULTER
LAURA BISHOP CRANDON German and Spanish A.B., Smith, 1899; A.M., Columbia, 1915
BERNICE FRANCES DODGE
STELLA S. DUNHAM
MARGARET GARSIDE Coach in Dramatics A.B., Wellesley, 1915
CHARLES DUDLEY GEROW
MARY BROWNSON GILLMORE Ph.B., Cornell, 1899; graduate student, Columbia, 1900-01, 1904-05
TAMES HEILMAN GROSS Mathematics
A.B., Pennsylvania College, 1913; A.M., Columbia, 1918

ROY WINTHROP HATCH
NELL ZENIA HAWKINSON
FRANK HEDERICK
PAUL HEINZELMANN
GEORGE THOMAS HOLM
CAROLINE WOODBRIGGE HOTCHKISS English Student, Radcliffe, 1895-96; Harvard, 1897; Columbia, 1900
EDITH INKS
CLARA BARBARA KIRCHWEY
GEORGE ALBRIGHT LAND
LILLIE MARIA LAWRENCE Latin B.S., Columbia, 1905
ALTON IRVING LOCKHART
CONRAD TRAVIS LOGAN
MARION G. MACKINNON Assistant in Household Arts A.B., McGill University, Montreal, Canada, 1910
Janet Rowland McCastline Recorder in Physical Education A.B., Columbia, 1902; A.M., 1905
A. BERDENA McIntosh English and Latin A.B., Wellesley, 1908
HARRY WHEELER MARTIN
ALBERT AMÉDÉE MÉRAS
WILLIAM JOHN NAGLE Latin A.B., Harvard, 1908; A.M., Columbia, 1916
JOHN DUELE NEITZ
ROBERT F. PAYNE
WALDO C. PEEBLES
OLIVE EWING PLACE
NINA FRANCES RAYNOR Latin A.B., Vassar, 1905; A.M., 1906
MARIE LOUISE ROBERT
KENNETH ROGERS English and Music A.B., Syracuse University, 1917
MILTON MYERS SMITH
PHILIP M. SMITH

EDGAR S. STOWELL
FLORENCE STUART
HOWARD FRANK TAYLOR
JOHN T. VAN SANT
CARLE O. WARREN
ETHEL WENK
ROLAND HUGH WILLIAMS
LAVERGNE WOOD
Teachers in Horace Mann Elementary School
GERTRUDE ISABEL BIGELOW First and Second Grades Diploma, Wheelock Kindergarten Training Class; student, Massachusetts State Normal School, 1900; Teachers College, 1912–13
MABEL McVey Meadowcroft
AGNES BURKE
EVELYN BATCHELDER
MILDRED IONE BATCHELDER
ALICE ELIZABETH PHELPS Open-Air Classes Diploma, New Britain, Conn., Normal School, 1905; student, Mount Holyoke, 1901–02, 1903–04
MARY JULIA DETRAZ
DAISY TAYLOR FREELAND
MARY EVELYN CARROLL
IDA ELIZABETH ROBBINS Fourth Grade Diploma, Oswego, N. Y., State Normal School, 1888
ETHEL MAY ORR Fourth Grade B.S., Columbia, 1917
RUTH BATCHELDER STACKPOLE Fourth and Fifth Grades Diploma, Farmington Normal School, 1908
Margaret Gertrude Condry
SIEGRIED MAIA UPTON
Marie Hennes
MARY FREDERIKA KIRCHWEY
MARY GERTRUDE PEABODY
TEXA LAURA MOORE

Diploma, Teachers College, 1895
DEFOREST LA VOY
MORRIS MEISTER
HELEN LATHAM
Diploma, Teachers College, 1905 ELIZABETH R. MERRITT
B.S., Columbia, 1918 CHARLES F. SMITH
B.S., Columbia, 1908 VANESSA GLUCKSMANN
MARGARET ELMINA TUTTLE
Diploma, Madison State Normal School, 1907 IRMA H. COXLEY
Student, Teachers College, 1915-18 HENRIETTA M. LANGNER Assistant in Household Arts.
B.S., Columbia, 1918 ALTA E. THOMPSON
Pd.B., State Normal College, Albany, 1903 MARGARET HAMERIK HOLMES
B.S., Columbia, 1915; A.M., 1918
Anne Bennett Briggs Assistant, Open Air, Grades II and III Special diploma, Teachers College, 1908
MARY HELEN COYKENDALL Assistant in Open Air, Grade IV Diploma, Montclair State Normal School, 1911; student, Teachers College, 1916
Teachers in Horace Mann Kindergarten
CHARLOTTE GANO GARRISON
ETHEL MARIA ROBINSON
B.S., Columbia, 1917 MARY EVERETT RANKIN
B.S., Columbia, 1917 MARY EVERETT RANKIN B.S., Columbia, 1913 BLANCHE LOUISE BIRCH A.B., Wellesley, 1902; A.M., Columbia, 1918 HELENE KNEIP B.S., Columbia, 1915 IV. SPEYER SCHOOL (Conducted in co-operation with the Board of Education of New York City)

V. THE LINCOLN SCHOOL

Administrative Board

James E. Russell, LL.D.
Dean of Teachers College, Chairman
Otis W. Caldwell, Ph.D.
Director of The Lincoln School

ABRAHAM FLEXNER CHARLES P. HOWLAND WICKLIFFE ROSE MRS. WILLARD STRAIGHT Mrs. Joseph R. Swan Arthur Turnbull George E. Vincent Felix M. Warburg

Teachers in The Lincoln School

reaction in the billeon School
ETHELWYN C. BRADISH Fine Arts Diploma, Teachers College, 1911
CHESTER A. BUCKNER Educational Measurements A.B., University of Iowa, 1909; A.M., 1911; Ph.D., Columbia, 1918
NELL C. CURTIS
ANNIE T. EATON
ALANSON H. EDGERTON
Margaret Faulkenhausen Secretary
CHARLES W. FINLEY
JOHN GUY FOWLKES
ANNA J. GANNETT
EARL R. GLENN
ELIZABETH GMINDER
GAIL HARRISON First Grade B.S., Columbia, 1915
Louis A. Herr
MARGARET HOLZ German and Spanish A.M., Columbia, 1915
JEAN HOSFORD
ALBERT H. HUNTINGTON
JOSEPH LYMAN KINGSBURY
STERLING ANDRUS LEONARD
LOUIE LESSLIE
HOWARD H. MASON
OLIVE MOORE
1917-18

Othon Quinche French
B. ès S., Neuchatel, 1905; A.M., Lausanne, 1909
SUZANNE ROTH
RALEIGH SCHORLING
LIDA LEE TALL Supervising Principal, Elementary School B.S., Columbia, 1914
F. F. VON COURT
GERTRUDE WIGHT
EFFIE MAY WILLIAMSON Fourth Grade B.S., Columbia, 1917
FLORENCE E. WINCHELL
Lydia A. Woliung
LULA E. WRIGHT Assistant in Elementary School B.S., Columbia, 1919

COLUMBIA UNIVERSITY

General Statement

Columbia University was founded in 1754 as Kings College by royal grant of George II, King of England, "for the Instruction of youth in the Learned Languages, and the Liberal Arts and Sciences." The Revolutionary War interrupted its active work; but in 1784 it was reopened as Columbia College. In 1912, the corporate title was changed to Columbia University in the City of New York.

The University at the present time consists of Columbia College, the undergraduate college of liberal arts, which offers a program of studies leading to the degree of Bachelor of Arts; the School of Law, with courses leading to the degrees of Bachelor and Master of Laws; the College of Physicians and Surgeons, with courses leading to the degrees of Bachelor of Science and Doctor of Medicine; the Schools of Mines, Engineering, and Chemistry, with courses leading to the several engineering degrees and the degrees of Chemist and Master of Science; the School of Architecture, with courses leading to the degrees of Bachelor of Architecture and Master of Science; the School of Journalism, with courses leading to the degrees of Bachelor of Literature and Master of Science; the School of Business, with courses leading to the degrees of Bachelor and Master of Science; the School of Dentistry, with courses leading to the degrees of Bachelor of Science and Doctor of Dental Surgery; the non-professional graduate Faculties of Political Science, Philosophy, and Pure Science, with courses leading to the degrees of Master of Arts and Doctor of Philosophy. In addition to these Schools and Faculties, the University includes the independent corporations of Barnard College, the undergraduate college for women, with courses leading to the degree of Bachelor of Arts; Teachers College, including the Faculties of Education and Practical Arts, with courses leading to the degrees of Bachelor of Science, Master of Arts, and Master of Science; and the New York College of Pharmacy, with courses leading to the degrees of Pharmaceutical Chemist, Bachelor of Science, and Doctor of Pharmacy.

The University maintains three Sessions during the year: The Winter Session, beginning the last Wednesday of September and ending the first Tuesday of February; the Spring Session, beginning the first Wednesday of February and ending the second Wednesday of June; and the Summer Session of six weeks' duration, beginning the Monday following July 4. For dates for 1919-1920 see academic calendar, p. 143.

A student may enter Columbia University as:

1. A matriculated student accepted and registered by the proper authorities as having fulfilled the preliminary qualifications for candidacy for a degree, or diploma. See §§ 2-4 for the requirements for admission to the School of Practical Arts as a matriculated student.

2. A non-matriculated student, permitted to attend such courses of instruction as he may be qualified to take, but not regarded as a candidate for a degree, or diploma. See § 7 for conditions of admission as a non-matriculated student.

TEACHERS COLLEGE

General Statement

Teachers College, founded in 1888, and chartered by the Regents of the University of the State of New York in 1889, became in 1898 part of the educational system of Columbia University. By an agreement dated June 8, 1915, the President of the University became ex officio the executive head of Teachers College with the powers and duties of President as defined by the statutes of Teachers College. The Faculties of Education and of Practical Arts in Teachers College are recognized as Faculties of the University under the administrative charge of the Dean of Teachers College. The College is represented in the University Council by its Dean and two elected members of each Faculty. The College maintains, however, its separate corporate organization, its Board of Trustees continuing to assume entire responsibility for its maintenance.

The Faculty of Education offers to advanced students of both sexes in the School of Education instruction in the history and philosophy of education, in educational psychology and sociology, and in the theory and practice of educational administration, supervision, and class-teaching. Its curricula lead to the degrees of Master of Arts and Doctor of Philosophy, conferred by Columbia University, and to Teachers College diplomas for instructors in education in colleges and universities, for supervisors, principals, and superintendents of schools of all grades, for heads of academic or education departments in normal and teachers' training schools, and for teachers in secondary schools.

The Faculty of Practical Arts offers to both men and women in the School of Practical Arts instruction both in education and technology relating directly to Fine Arts, Household Arts, Industrial Arts, Music, Nursing and Health, and Physical Education. Its curricula lead to the degrees of Bachelor of Science and of Master of Science, conferred by Columbia University, and to the Teachers College diplomas for teachers and supervisors of various lines of practical arts. In co-operation with the Faculty of Education, the Faculty of Practical Arts conducts graduate work in the educational aspects of practical arts leading to the degree of Master of Arts.

For the degree of Bachelor of Science there is offered a General Curriculum for the Freshman and Sophomore years preparatory to a Professional Curriculum for the Junior and Senior years. The requirements for admission and graduation are equivalent to those in leading American colleges, and the Bachelor of Science degree admits to graduate work for the degrees of Master of Science, Master of Arts, or Doctor of Philosophy.

The General Curriculum (see § 14) includes general cultural subjects as well as a foundation for a technical training in various phases of practical arts. The Professional Curriculum (§ 15) and graduate work (§ 18) are arranged with reference to technical or education majors (§ 16).

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SCHOOL OF PRACTICAL ARTS

REOUIREMENTS FOR ADMISSION

I. Matriculated Students: Freshman Class

Applicants who fulfil the requirements stated below for admission to the Freshman class may be registered as matriculated students and candidates

for the degree of Bachelor of Science.

The Freshman class is limited as to the number of students. Applications for admission to this class should be sent to the Secretary of Teachers College as early as possible, preferably before September. Applications must be made on blanks to be obtained from the Secretary of Teachers College.

The requirements for admission are stated in terms of units, a unit meaning the equivalent of five recitations a week for one year in one subject in a secondary school. Fifteen units are required for admission. The subjects, required and elective, together with the number of units which will be accepted in each subject, are indicated below (§ 3) under Entrance

Students in the Freshman class are required to register for a regular program (see § 14), unless a special program is permitted by the Committee on Instruction, in which case the student will be subject to the rule for

irregular students (see § 8).

Applicants may be admitted to the Freshman class:

I. By Examination.

(a) By Columbia University.

(b) By the College Entrance Examination Board.

Full information concerning preliminary application for examination, time and place of examinations, and subject-matter will be found in the Bulletin of Entrance Examinations and Admission, which may be obtained from the Secretary of Teachers College.

2. Or, On Certificate from Approved Secondary Schools.

Applicants applying for admission on certificate must present the following credentials:

- (a) A diploma of graduation from an approved secondary school having a curriculum of not less than four years.
- (b) A statement from the principal of the school from which the applicant has been graduated certifying that a course of study which has included the 15 units of prescribed and elective work men-tioned below under *Entrance Subjects* has been satisfactorily completed, that is, with certificate grades.
- (c) A statement from the principal of the school, or from some other authorized and approved member of the faculty of the school, that the applicant possesses the qualifications of character, health, and scholarship necessary for successful work in the School of Practical Arts.
- 3. Or, On Credentials from the Education Department of the State of New York.

Credentials furnished by the Education Department of the State of New York showing that the applicant has completed certain courses in a high school in the State of New York, and that he has passed the examinations of the Education Department in these subjects will be accepted for admission in so far as they name specifically and state examination grades for the recognized subjects (or lettered or numbered parts of a subject) which are stated in the Columbia University Bulletin of Entrance Examinations and Admission. There must also be submitted a statement as defined under 2 (c) above.

Entrance Subjects

§ 3	Required of all applicants: English											
	GROUP I											
	Two units selected from the following subjects are required, more to be offered as electives: Algebra											
	Plane Geometry											
	Botany I "Chemistry I "											
	Physics											
	Physiography											
	GROUP II											
	The applicant must offer 2 units from the subjects following, and may offer more as electives without restriction other than that to offer an advanced unit will involve offering the corresponding elementary one:											
	Elementary French 2 units											
	Elementary German											
	Elementary Greek 2 or 3 "											
	Elementary Latin											
	Italian											
	Spanish											
	History											
	Intermediate French											
	Intermediate German											
	Advanced French											
	Advanced German											
	Advanced English											
	Advanced Greek											
	Advanced History											

Advanced Latin Advanced Mathematics .

GROUP III

The applicant may offer not more than 4 elective units in all from the four subjects following:

Drawing												I	unit
Household Arts		٠								I, 2	or	3	units
Music													
Industrial Arts										I, 2	or	3	

The requirements in each of the above subjects are outlined in the *Bulletin of Entrance Examinations and Admission*, which may be obtained from the Secretary of Teachers College.

Il. Matriculated Students: with Advanced Standing

Advanced standing may be granted to entering students who have completed, in a college, technical school, normal school, or training school, approved courses in advance of high-school graduation. Application for admission to advanced standing should be made on a blank form which will be sent on request.

All candidates for the degree of Bachelor of Science, even those who have previously completed three or four years of approved study in other colleges, must be in residence as regular students at Teachers College at least one year, or two half-years, and complete a program of not less than 24 points. As a rule, a program of 32 or more points is prescribed by the Committee on Instruction.

Courses taken in Extension Teaching or in the Summer Session are not credited toward this minimum residence requirement for the Bachelor's degree, unless the Executive Committee suspends the rule and credits in part Summer Session courses for a student with exceptionally high standing.

III. Part-time Matriculated Students

Teachers and others in or near New York City, who desire to pursue regular work in the School of Practical Arts, but are able to devote only a portion of their time to such work, may matriculate as candidates for degrees, with all the privileges of regular students. Such students are required to comply with all of the regulations for registration, attendance, proficiency, and examinations established for students in full residence (see §§ 24–29 and also § 8). A special index of afternoon, evening, and Saturday courses for part-time students is given on pages 141 ff.

IV. Matriculated Unclassified Students

Students who can fulfil the requirements for matriculation, who are over twenty years of age, who have educational records of high standing and who foresee that probably they will be able to spend only one or two years in residence, may be admitted as "matriculated unclassified" students. Each unclassified student will be assigned to an adviser representing the department of major interest and will be allowed to pursue a special program of study, subject to approval by the adviser and by the chairman of the Committee on Instruction. (See also § 8.) In the case of the majors in education in Fine Arts, Household Arts, Industrial Arts, Music, Nursing and Health, and Physical Education (§ 16) only students with successful experience in teaching or other professional work in the field in which they propose to specialize will be admitted as unclassified.

V. Non-Matriculated Students

A limited number of mature students whose irregular preparation for college does not fulfil the requirements for matriculation (§ 2), that is,

§ 4

§ 5

§ 6

§ 7

admission to candidacy for a degree, but who are well prepared for some phase of the technical work of the School of Practical Arts, may be admitted as non-matriculated students. Such students will be assigned to advisers, and their programs of study must be approved by advisers and by the chairman of the Committee on Instruction. No program will be approved for less than 10 or more than 18 points per half-year. See also § 8. Non-matriculated students are subject to the same rules as to attendance, examinations, proficiency, and deficiency as are matriculated students (see §§ 24–30).

VI. Irregular Students

The following kinds of students will be regarded as "irregular" under the rule regarding limited sections (see § 24-4): Freshmen admitted with conditions, students with programs of less than 14 points per Session, matriculated unclassified students, non-matriculated students, and extension students.

VII. Extension Students

The School of Practical Arts offers extension courses in technical lines and open to students who register in the University Department of Extension Teaching (see § 33).

DEGREES, DIPLOMAS AND CERTIFICATES

Bachelor of Science

The Bachelor of Science degree is awarded by the University on recommendation of the Faculty of Practical Arts for the satisfactory completion by matriculated students of four years of approved college courses, aggregating 124 points and including one of the majors named in § 16. As described in § 12 below, students may be at the same time candidates for the Bachelor's degree and a Teachers College diploma in education or in technical work.

Higher Degrees

§ 11 Graduate students with majors in the field of practical arts are received in Teachers College as candidates for the Master's and Doctor's degrees. See §§ 17-23 and also the statements regarding the majors in technical education referred to in § 16.

Teachers College Diplomas

Students of the School of Practical Arts may be at the same time candidates for degrees and Teachers College diplomas. The degrees represent completion of required curricula with certain standards of scholarship, while the diplomas certify to the professional ability and promise of students, either in educational or in technical work. The diplomas are awarded by the University to those holders of the Bachelor's or other approved degrees who as Seniors or graduate students in the School of Practical Arts have completed at least a year's professional work, approved by the Committee on Instruction, and who have demonstrated commendable professional ability which leads the Faculty to recommend them by means of Teachers College diplomas.

Diplomas in teaching or supervision are awarded to selected students of technical education who besides holding approved degrees give promise of professional success in the educational field. Personality, character, experience, scholarship, and technical training will be considered by the Faculty when estimating the student's fitness for educational work, e. g., teacher of elementary household arts, supervisor of school music, etc.

The Faculty may decide to recommend a student for a degree but withhold a diploma for some time until the candidate has demonstrated ability

in educational work.

Certain of the Teachers College diplomas may be awarded to students who complete the requirements for the degree of Bachelor of Science with education majors in Fine Arts, Household Arts, Industrial Arts, Music, Nursing and Health, and Physical Education. Examples of such diplomas are: Teacher or Supervisor of Fine Arts, Teacher or Supervisor of Household Arts, Teacher of Industrial Arts, in Elementary Schools, Teacher or Supervisor of School Music, Teacher in Schools for Nurses, Teacher of Hygiene and Physical Education.

Graduate students may also be candidates for the above diplomas. Certain diplomas for supervision and advanced teaching will be granted only to students who have completed satisfactory graduate study in Teachers College. Examples of such diplomas are: Supervisor of Hygiene and Physical Education, Supervisor of Industrial Arts in Higher Schools, Teacher of Household Arts in Colleges, Teacher of Industrial Arts in

Colleges.

The detailed requirements for the various diplomas in technical education are stated in this Announcement in connection with the education majors in Fine Arts, Household Arts, Industrial Arts, Music, Nursing and Health,

and Physical Education (see references in § 16).

Diplomas certifying to technical proficiency in particular fields of practical arts may be awarded in connection with approved degrees to candidates whose work in any major has shown special technical ability. Examples of such diplomas are: Public School Nurse, Public Health Nurse, Dietitian, Household Manager.

Certificates

A matriculated student (see § 2) who has been in residence in Teachers College at least two academic years, either as a regular or as an unclassified student, and who has satisfactorily completed the required courses in any one of the professional majors listed in § 16 (except the education majors in Household Arts, Fine Arts, Industrial Arts, and Physical Education), and not less than 60 points, may, on petition to the Faculty of Practical Arts and on the recommendation of the adviser concerned, receive a certificate. For reasons of weight, the required courses of the major may, on the recommendation of the adviser concerned and with the approval of the Committee on Instruction, be modified to meet individual needs. Students are not registered as candidates for certificates: and petitions will be considered only when mature students with special experience in the line of the major in which they are registered, either as regular or unclassified students, are unable to devote time to the completion of work for a Bachelor's degree. The Committee on Instruction may recommend certificates for students with high scholarship, who have been in residence one year and have completted the equivalent of a second year in summer sessions of Columbia University or in regular sessions of other approved institutions of collegiate grade.

REQUIREMENTS FOR THE BACHELOR'S DEGREE

The required four years of college work leading to the degree of Bachelor of Science include:

I—General Curriculum, preparatory to Professional Curriculum. (Freshman and Sophomore years.)

II—Professional Curriculum. (Junior and Senior years.)

§ 13

§ 14

\$ 14

The General Curriculum preparatory to the Professional Curriculum includes required and elective courses aggregating 64 points (see below). The Professional Curriculum of 60 points includes a major (see § 16) and electives. Total 124 points required for four years.

I. General Curriculum (Freshman and Sophomore years)

The General Curriculum includes the following academic courses prescribed for all students: English (12 points), modern language (at least 6 points), history (6 points), science (8 points), physical training (4 points),

hygiene (2 points).

The following courses may be counted in the general requirement of 8 points in Science: Any courses in Biology, Chemistry, Geography, Hygiene (except Hygiene A), Mathematics, Nature-Study, and Physics. Four points in advanced Mechanical Drawing, Cookery, Nutrition, or Industrial Arts may be substituted for Science in the case of students whose majors do not require these subjects.

In addition to the foregoing required academic courses, the students should elect under the direction of the associate adviser technical courses preparatory to the major which is to be selected in the Professional Curriculum (see Technical Courses listed below for Freshman and Sophomore

vears).

This curriculum is *not intended* for students who are preparing for professional work other than Practical Arts, and therefore will not be credited by other professional schools of this University.

Outline of General Curriculum

Courses for Freshman year (32-34 points)

English A—6 points

History A1-A2-6 points

Language—6 points

Hygiene A-2 points

Physical Training A—2 points

Science—8 points

Technical courses preparatory to future major in the Professional Curriculum for the Junior and Senior years (see below and § 16)

If program requires, history and science may be taken in the second year Courses for Sophomore year (32-36 points)

English B—6 points

Physical Training B—2 points

Complete the required general courses in language, history or science. If technical program prescribed below conflicts, History A3-A4 or B; and four points of science may be left for the Junior year

Complete any special requirement in letter of admission

Elective general courses (see §§ 36–52)

Technical courses preparatory to future major (see below and § 16)

Technical courses for Freshman year

In preparation for major in:

Drawing and Painting-Fine Arts 1, 2, 3, 4

Art Industries—Fine Arts 1, 2, 3, 4

House Design—Fine Arts 1, 2, 3, 4, Drawing 3-4 Costume Design—Fine Arts 1, 2, 3, 4, Clothing 15

Cookery—Chemistry 1-2, Physics I, Cookery I, 3, 4, Nutrition I

Textiles and Clothing—Fine Arts 1, Chemistry 3, Clothing 5, 15,

Textiles 31
Household Administration—Biology 4, Chemistry 3, Administration
A, 1, Cookery 1

General Household Arts—Chemistry 3, Biology 4, Cookery 1, Cloth-

Industrial Arts—Drawing 1-2, Fine Arts 1-2

Music—Music 21-22, or 41-42, 13-14, or 25-26, and technical music Physical Education—Biology 4, Chemistry 3, or Physics 1, Music 27-28, Speech 1-2

Technical courses for Sophomore year

In preparation for major in:

Drawing and Painting—Fine Arts 25–26, 53–54, 69–70 Art Industries—Fine Arts 25–26, 31–32, 75–76, Drawing 3–4 House Design—Fine Arts 14, 80, Drawing 31–32 Costume Design—Fine Arts 21, 22, 97–98, Clothing 27, 33

Cookery—Biology 4, Chemistry 25, 31, Cookery 41, 61, 75

Textiles and Clothing—Fine Arts 2, 3, 21, Clothing 27, 33, 35, 45 Household Administration—Biology 57, Nutrition 1, Cookery 2,

Chemistry 23, Administration 11

General Household Arts—Administration 1, Cookery 3, Fine Arts 1-2, Clothing 15

Industrial Arts—Physics 1, Drawing 31-32, Mathematics 31-32, Industrial Arts 47–48

Music—Music 31, 33-34, 41-42, and technical music Physical Education—Physical Education 5-6, Cookery 2, Nutrition 1, Fine Arts 69-70, Speech 3-4, Nursing 5

II. Professional Curriculum

(Junior and Senior years)

The requirements for admission to the curriculum may be satisfied by two years of the General Curriculum described above.

Matriculated unclassified students may be admitted to this Professional

Curriculum under the rules stated in § 6.

Any general or technical courses prescribed in the General Curriculum and not completed in the first two years should be included in the student's

program for the Junior year.

The 60 points of required work of the Professional Curriculum must include the courses of one of the majors (§ 16) and electives chosen under the direction of the adviser. In certain exceptional cases, particularly of students credited with several years of college work completed elsewhere, the Committee on Instruction may approve, for the Bachelor's degree but not for a Teachers College diploma, a group of allied courses in place of those of a regular major.

PROFESSIONAL MAJORS

Note.—Majors 1-4, 6-9, 11-12, 14, 18, and 19 are technical and lead to the degree of Bachelor of Science. Majors 5, 10, 13, 15, 17, and 18 emphasize technical education and lead to Teachers College diplomas for teachers and supervisors in addition to the degree of Bachelor of Science. For list of advisers in these majors, see § 17.

1. Drawing and Painting. (See § 52) 2. Design in the Art Industries. (See § 53) 3. House Design and Decoration. (See §53)

4. Costume Design and Illustration. (See § 53)

Fine Arts Education. (See § 60)

§ 16

. . . Fine Arts

§ 15

 6. Foods and Cookery. (See § 62 7. Textiles and Clothing. (See § 8. Household or Institutional Adtion. (See § 72) 9. General Household Arts. (See 10. Household Arts Education. (68) ministra- \$ 76) . See § 77)
11. Industrial Drawing and Design St. 12. Industrial Arts. (See § 83)	See § 85)
15. Music Education. (See § 92)	
17. Physical Education. (See § 10 18. Practical Science. (See § 108)	or) Physical Education
(a) Applied Biology	
§ 16 (b) Applied Chemistry and (c) Nutrition (d) Hygiene	Physics } Science

Education Majors

Majors 5, 10, 13, 15, 17, and 18 above are intended for Juniors and Seniors who are preparing for teaching.

Vocational Majors

Courses selected in connection with certain of the above majors may be grouped so as to lead to the following vocations other than teaching. The numbers in parentheses below refer to the majors above in which the vocational work should be centered.

Fine Arts: Designer in art industries (2); House decorator (3); Costume

designer or illustrator (4)

Household Arts: Dietitian (18, 8); Director of housekeeping, in college dormitories, orphanages, hospitals (8); Manager of lunch-rooms, in high schools, factories, department stores, clubs, inns (6, 8); Home-makers (9); Food demonstrators (6); Visiting housekeepers, e.g., in charity organizations (8); County agent's extension work (6, 8)

Nursing and Health: Superintendents of hospitals; Superintendents of

training schools for nurses; Public health nurses; School nurses

Physical Education: Supervisors of recreation clubs and activities (17)
Practical Science: Laboratory technicians in sciences applied to practical
arts (18)

ADVISERS

Advisers for General Curriculum

(Freshman and Sophomore years)

Each new student will be assigned to an adviser and also to an associate adviser as soon as professional interest is determined. The adviser in consultation with the associate adviser directs the work of the student through the Freshman and Sophomore years.

Advisers: Miss Vanderbilt (chairman), Professors Abbott, Andrews, Broadhurst, Carpenter and Cook, Miss Stackpole, Miss Francis, Miss

Diller, and Miss Townsend.

\$ 17

Associate advisers representing professional majors for which students are preparing: Professors Van Arsdale (cookery), Fales (clothing), Rose (nutrition and food chemistry), Gunther (household administration), Cornell (fine arts), Farnsworth (music), Miss Colby (physical education), Mr. Bowman (industrial arts), Professor Stewart (nursing and health).

Advisers for Professional Curriculum

(Junior and Senior years)

The professional advisers are automatically assigned by the student's selection of a major:

I. Drawing and Painting, Professors Dow and CORNELL.

2. Design in the Art Industries, Professor Dow; Mr. Martin, associate adviser.

3. House Design and Decoration, Professor Dow.

4. Costume Design and Illustration, Professor Dow; Miss Wilmot and Miss Northrup, associate advisers. 5. Fine Arts Education, Professor Dow; Miss Dement, associate adviser.

6. Foods and Cookery, Professor Van Arsdale.

7. Textiles and Clothing, Professor FALES.

8. Household or Institutional Administration, Professor Gunther; Miss Fisher, associate adviser.

9. General Household Arts, Professor Gunther.

10. Household Arts Education, Professors Cooley, Winchell, Spohr, and Miss Marshall; Professors Rose, Van Arsdale, Fales, and Gun-THER, associate advisers.

II. Industrial Drawing and Design, Professor Weick.

12. Industrial Arts, Professor Bonser; Mr. Bowman, associate adviser. 13. Industrial Arts Education, Professor Bonser; Mr. Bowman, associate

14. Music, Professor Farnsworth; Mr. Kraft, associate adviser.
15. Music Education, Professor Farnsworth; Mr. Kraft, associate adviser.

16. Nursing and Health Education, Professor NUTTING; Professors Good-RICH and STEWART, associate advisers.

17. Physical Education, Professors Wood and Williams; Miss Colby,

associate adviser.

18. Practical Science, Professor Broadhurst; Professors Bigelow, Wood, and Rose, associate advisers.

GRADUATE INSTRUCTION IN PRACTICAL ARTS

The graduate courses under the Faculties of Teachers College may lead at the same time to a Teachers College diploma and to a Master's or Doctor's degree. All degrees and diplomas are conferred by the University. Students who register in Teachers College may pursue, with the approval of the adviser, courses under one or more of the other Faculties of the University. Similarly, graduate students enrolled under other Faculties of the University may take Teachers College graduate courses.

A full statement of the graduate courses in education offered by Teachers College will be found in the Announcement of the School of Education. Full statements of the other graduate courses offered in the University are contained in special bulletins which may be obtained from the Secretary of

Teachers College or from the Secretary of the University.

Admission Requirements

Graduates of approved colleges or scientific schools holding Bachelor's degrees in arts, letters, philosophy, or science, or an engineering degree, are regularly admitted to Teachers College as candidates for the degrees of Master of Science, Master of Arts and Doctor of Philosophy and for the Teachers College diplomas, and may elect as major work the graduate courses in the School of Practical Arts.

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A Senior in the School of Practical Arts, who, at the beginning of any half-year, is within twelve points of a Bachelor's degree, may be permitted, with the written approval of the adviser, to make a program continuing undergraduate and graduate courses. Such courses must be registered in Teachers College. If the student afterwards matriculates as a candidate for a higher degree, the graduate courses previously taken by him under this provision will be entered in his curriculum as already completed. A student who thus combines graduate and undergraduate work must not exceed 16 points per half-year.

Applicants for admission to graduate study with major work in the School of Practical Arts must obtain from the Secretary of Teachers College a blank form for application and record of previous work. Successful

applicants will receive formal letters of admission.

Residence

The minimum residence for the Master's degree is one year; for the Doctor's degree, two; provided, however, that the period of residence of students from institutions in which the course of study is not regarded as equivalent to that leading to the Bachelor's degree in Teachers College may be proportionately extended. The satisfactory completion of work at four Summer Sessions, or at two Summer Sessions together with a half-year of the regular academic year, will be accepted in full satisfaction of the minimum requirements for residence for the Master's degree. Candidacy for this degree may extend throughout a period of five years.

PROGRAM OF STUDIES

For the Degrees of Master of Arts and Master of Science for Candidates Specializing in Teachers College

The following requirements have been in effect since July 1, 1917. A candidate for either of the Master's degrees who has completed previous to this date a part of his requirements may finish the remaining requirements under the former regulations; or, if he prefers, he may come under the new regulations. Each "half course" already completed will count as 2 points and each "full course" as 4 points.

Each of the Master's degrees represents the work of one academic year of about forty hours a week in class attendance, preparation, study, or laboratory. The degree will be conferred after the following requirements

have been satisfied.

1. The candidate shall have registered for and attended courses aggregating not less than 30 tuition points distributed over a period of not less than one academic year or its equivalent. Four Summer Sessions constitute

the equivalent of one academic year.

2. The candidate shall have completed in Teachers College courses totaling at least 16 tuition points, three of which shall be practical or advanced courses, of three or more points, numbered above 300 in the School of Education or above 200 in the School of Practical Arts. The remaining courses necessary to complete the tuition requirements of 30 points may be taken either in Teachers College or in other departments of the University.

3. Essay or Practical Work—An essay or written report on field investigation, practice teaching (for inexperienced teachers), or some other form of practical work demonstrating the ability of the student to select, organize, and present the results of professional investigation in the field of major interest, is required for the Master's degree in addition to the requirements stated above in (1) and (2). The choice of such essay or report must be

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approved in advance by Professor Monroe. Upon completion, the essay or report must be approved by the instructor in charge of the student's subject of major interest. After such approval and acceptance, the candidate must file two copies of the essay or report with the Registrar not later than the dates fixed in the Academic Calendar.

There may be substituted for the required essay or report, with the approval of Professor Monroe, a written digest of six unit courses, or an extra course in Teachers College, in addition to the courses covered by the 30 tuition points. No tuition fees are charged for the essay or report or the six unit courses, but the full tuition fee is charged for a course substituted

for the essay.

4. Every candidate, before entering upon his work for the degree of Master of Arts, should have completed courses in Educational Psychology and in History and Principles of Education equivalent to Education A and B, as offered in the undergraduate departments of this University. If these courses have not been completed, at least one of the courses required in Teachers College must be a general introductory course in education. A student specializing in the technical phases of practical arts may waive this requirement in general educational subjects by becoming a candidate for

the degree of Master of Science instead of Master of Arts.

Apart from the above requirement, the curriculum for a Master's degree is arranged for each student by the adviser and must be approved by Professor Monroe, chairman of the committee in charge of graduate instruction. The whole curriculum may not fall entirely within one department of Teachers College; it must include at least two courses in some other department of Teachers College or in some other part of the University. In case of deficient preparation, the adviser, with the approval of the Committee on Instruction, may prescribe prerequisite undergraduate courses without credit.

For the Degree of Doctor of Philosophy

For Candidates with Major in Teachers College

(See Announcement of the School of Education)

Other Requirements for Higher Degrees

For a full statement of all the formal University regulations concerning residence, requirements, examinations, etc., for the higher degrees, see the "Circular of Information for Graduate Students," which may be obtained from the Secretary of Teachers College.

GENERAL REGULATIONS

Registration

I. Registration extends through the week before the opening of the academic year in September and during two days preceding the opening of the Spring Session (second half-year) in February. Graduate students are allowed additional days. Exact dates are given in the Academic Calendar, which is printed on some of the last pages of this Announcement. Registration at a later date is permitted only to students who, showing good cause for the delay, obtain the consent of the Committee on Instruction and pay a late registration fee of five dollars. This applies also to students who are in residence in the first half-year and who neglect, during the registration

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days of the second half-year, to make any necessary changes of programs, including reservations of limited sections. Students thus permitted to register at a late date are required to pay full tuition for the Session in which they register. Students who enter any course three weeks or more after its beginning are allowed only half credit; but no credit is allowed to those entering a course later than the middle of either half-year.

An individual's registration for a given Session is completed by filing a program card (see 2 below) with the Registrar and paying required fees (see § 31) to the Bursar. Each person whose registration has been thus completed will be considered a student of the University during the period

for which such registration is held valid.

2. At registration, each student must file with the Registrar, on program cards signed by the adviser, a list of all of the courses he desires to pursue for the half-year (in September, for both half-years). No credit is allowed for any course not approved and registered in this manner. Any necessary changes in such registered lists must be approved by the adviser and filed with the Registrar, on blanks provided for the purpose. Without the special permission of the Committee on Instruction, undergraduates will not be permitted to make changes later than the second Saturday of each half-year.

3. No student in the Freshman and Sophomore years is permitted to register for more than 16 points (not including one point in Physical Training A or B) for his first half-year in residence. Students who receive grades D or F during any academic year or in the following Summer Session may be required by the Committee on Instruction to register for limited programs in the following half-year and until a satisfactory record is established. Very deficient students may be required by the Committee to limit their programs at any time during an academic year. Except in the cases just noted, the maximum program for any half-year is 18 points (not

including one point in Physical Training A, B, C, or D).

4. Limited Classes; Many classes are necessarily limited as to the number of students. All limited classes are indicated by the letter L affixed to the course number, e. g., Cookery 2L. Students must reserve places in such classes by personal application to the clerks in charge of limited sections before registration cards are filed at the Registrar's office. Reservations for the first half-year (Winter Session) may be made during the official registration days in September, and for the second half-year (Spring Session) in the last two days of the Winter Session. Concerning reservations for the Summer Session, see the Announcement of that Session. If a change of program after registration involves dropping or changing a limited section, the student must report to the clerks in charge of limited sections (Room 125 Macy or 107 Teachers College) before filing a revised program at the Registrar's office.

Irregular students (see § 8) will not be registered for limited classes until

the last day of the official registration period in each half-year.

5. Certain courses in other parts of the University are open to qualified undergraduate students in the School of Practical Arts who before registration obtain written permission of the Director of the School. Students should always consult the official Announcement of the Faculty, College, or Division in which work is desired, not depending upon quotation from them in other Announcements. Columbia College is open only to men; Barnard College only to women; Teachers College and a large number of graduate courses in other parts of the University are open to women on the same terms as to men.

6. Courses in the School of Practical Arts are open to students from other parts of the University if they have permission of the Director of the School and of the Dean or Director to whom the student is responsible.

7. No student is permitted to transfer from one Faculty or School of the University to another, or to register in another educational institution,

without the written consent of the Deans or Directors concerned.

8. One point of credit is given for one hour each week for one half-year in lecture, observation, or practice teaching with one and a half hours of supplementary work, or for two hours of laboratory, studio, or shop work, with a half hour of additional work. In general, fifteen lectures or thirty hours in laboratory or studio are required for one point. With the exception of certain one-point supplementary courses indicated by x affixed to their numbers, no course has credit of less than two points.

Examinations

9. Examinations are held in all undergraduate courses in January and May, unless special omissions are approved by the Committee on Instruction. The duration of each examination period is ten days. For dates, see the Academic Calendar at the end of this bulletin.

10. As soon after the examination periods as the records are complete, each student will receive from the Registrar a report stating whether he has passed or failed in the courses pursued. The grades recorded are open only

to officers of instruction and administration.

11. Examinations for deficient students in the School of Practical Arts are held on the fourth Wednesday in September and the first Saturday in March. Students who expect to take these examinations must apply in writing, at least two weeks in advance, to the Committee on Instruction. Deficient students eligible for these examinations are those who, for acceptable reasons, have failed to attend regular examinations or who have the permission of the Committee on Instruction (see § 26) for a second examination in courses in which the grade F was received.

12. For examinations as stated in 9 and 11 above there is no charge. Examinations other than those specified are not held except with the approval of the Committee on Instruction, and in every such instance the student must pay in advance at the time of application a special examina-

tion fee of five dollars.

Deficiencies

13. A student who receives the grade F in any course may be required to repeat the course, to substitute an equivalent, to complete satisfactorily special work assigned by the instructor, or to take a second examination. Each case will be decided by the Committee on Instruction in consultation

with the instructor.

Reports of "F" and "incomplete" may be removed from the Registrar's records by examination or by special work only within the two regular sessions following the session in which such marks were received. The time will be extended one year in the case of students who are out of college for a year following that in which such marks are received. After the periods thus limited "F" and "incomplete" can be removed from the records only by repeating courses concerned.

14. All undergraduate students in the School of Practical Arts are on

probation until the end of the first half-year of residence.

15. Students whose scholarship at any time is not satisfactory may be placed on probation for a stated period and on conditions to be determined in each case by the Committee on Instruction.

16. If the scholarship of students on probation continues to be unsatisfactory to the Committee on Instruction, such students will be required to withdraw from the School at the end of the stated period of probation.

17. Students whose scholarship is not satisfactory to the Committee on Instruction may be required at any time to make changes in programs of work.

§ 25

18. The Committee on Instruction may increase or decrease a student's requirements for graduation in accordance with the quality of work in any year. Requirements will be increased whenever a student has an undue proportion of low grades.

Attendance

§ 27 19. The presence of all students is required at the College on the day immediately following the close of all vacations and recesses. The Academic Calendar for the year 1919-1920 may be found on the last pages of this bulletin. It is especially to be noted that there is no official recess between the Winter and Spring Sessions.

20. Students who are deficient in their attendance may be required at any time to make such changes in program or plan of work as the Committee on Instruction may deem necessary. See also 17 above.

21. Students are required to attend their classes regularly, to keep a record of their absences and tardiness, and to report (on special blanks) to instructors at the middle and end of each half-year. Instructors will also keep records of attendance. If the total time lost in any course is less than one-sixth of the total hours required for the half-year, the instructor may require special work or reduce grades. If one-sixth is exceeded, the instructor will report, at the end of the half-year, to the Committee on Instruction, which will confer with the student and instructor and reduce grades or credit in proportion to time lost.

22. Students who find that stated academic exercises are fixed for days set apart for religious observance by the church to which they belong, and who are prevented by conscientious scruples from performing their University duties on those days, are required to report in advance to the

Registrar.

The Dean of Teachers College or the Director of the School of Practical Arts may, for reasons of weight, grant a limited leave of absence to a student of good standing.

Health

§ 28 23. All students taking eight or more points per half-year are required at the beginning of each year to pass a health examination satisfactory to the Department of Physical Education. Students may at any time be required to modify or discontinue their work for physical reasons.

The College Physician and the assistant physicians (one of whom is a woman) give professional advice free of charge to students who consult

them in their offices in the Thompson Building.

Academic Discipline

24. The admission, continuance upon the rolls, and graduation of every \$ 29 student are subject to such exercise of the disciplinary power of the University as may be necessary to enforce the rules of the University and to maintain such standards of personal conduct and character as are acceptable to the University.

Withdrawal

§ 30 25. In cases of withdrawal for any reason, students should notify the Registrar in writing without delay. No application for a return of fees can be considered unless such application is made at the time of withdrawal. The College reserves the right to retain fees of students withdrawing from limited classes (see § 24-4).

An honorable discharge will be granted to any student in good academic standing, and not subject to discipline, who may desire to withdraw from the University; but no student under the age of twenty-one years shall be entitled to a discharge without the assent of his parent or guardian furnished in writing to the Dean or Director.

The University Statutes provide that tuition fees and the University fee are payable semi-annually in advance. Registration will not be complete until such fees are paid. No reduction in fees is made for late registration. Payment of fees after the last day of registration imposes automatically the statutory charge of \$5 for this privilege. Under the regulations, the privileges of the University are not available to any student until he has completed his registration.

Fees for degrees, diplomas, certificates and special examinations are

payable at the time of filing application for these.

The fees to be paid by students are subject to change at any time at the

discretion of the Trustees of Teachers College.

The point value of each course upon which tuition fees are based is given in connection with the announcement of the courses in §§ 36-108.

(a) University Fee: For all students for each Session or any part thereof		\$5.00
(b) Tuition Fee: For all students per point, except in cases where a special fee fixed for a particular course		6.00
(c) For a Degree, Diploma, or Certificate, or for an examinat therefor:	ion	
For a Teachers College Certificate or Diploma		5.00
For the degree of Bachelor of Science		15.00
For the degree of Master of Arts, or of Science		25.00
For the degree of Doctor of Philosophy		35.00
(d) For Privileges:		
(1) Late registration or application (see § 24–1 and Calendar)		5.00
(2) Deficiency or special examination (see § 25–12)		
(3) Maximum fee for examinations in a single series		
The conditions under which such privileges shall be granted	are	to be

(e) Rebates:

determined by the Registrar with the approval of the Dean.

(1) The University Fee and the Degree Fee are not subject to rebate.(2) After the last day of the period provided for change of programs (second Saturday of either half-year for undergraduates, fourth Saturday for graduates), no tuition fees will be returned for any course which the student may for any reason discontinue. Exception to this rule may be made only in cases of total withdrawal from the University, when a pro rata return of fees may be authorized by the Controller. When a rebate is allowed for the discontinuance of courses or withdrawal from the University, such rebate will be reckoned from the day upon which the Registrar receives notice from the student.

Note. All laboratory, gymnasium, shop, studio, and other special fees are now included in the University and tuition fees.

SUMMER SESSION

The twentieth Summer Session of Columbia University will open on Monday, July 7, 1919, and close on Friday, August 16. Teachers College now makes the Summer Session an integral part of its academic year. Most 831

professors take part in the work of summer instruction—some of them every year, some in alternate years, nearly all at some time within a four-year period. Teachers College courses that are most in demand are given every year; many other important courses in alternate years or within a four-year cycle. The courses offered are planned to meet the needs of teachers in elementary, secondary, and normal schools, and in colleges. Students register but do not necessarily matriculate, i. e., become candidates for degrees or diplomas. Students who become regular candidates for a Teachers College diploma and degree will receive credit for courses taken in the Summer Session, according to the regulations stated in connection with the announcement of each such course. Application for matriculation must be made to the Secretary of Teachers College, who may be consulted personally during the Summer Session. At least one year of the work for the Doctor's degree and for the Bachelor's degree must, however, be done during the regular academic year. The Master's degree may be earned entirely through Summer Session work within five years from matriculation.

The Announcement of the Summer Session, containing detailed information concerning the courses offered and concerning board and lodging, may be obtained from the Secretary of Columbia University, or from the

Secretary of Teachers College.

EXTENSION COURSES

The School of Practical Arts, in co-operation with the University Depart-\$ 33 ment of Extension Teaching, offers to teachers and others in New York City and vicinity extension courses in various phases of practical arts. Many of these courses are given at afternoon, evening, and Saturday hours convenient for those whose regular duties make their attendance at regular day classes impossible. Students in extension courses who matriculate in Teachers College, satisfying the requirements for admission to any one of the regular curricula, outlined in §§ 9-16, may, according to the special regulation for extension courses, count such courses toward any diploma and degree for which the corresponding regular courses may be counted. At least one year of the work required for any degree or diploma must, however, be taken in residence courses.

A full announcement of extension courses in the School of Practical Arts is included in the last section of the annual Announcement of Extension Teaching, which may be obtained from the Secretary of Columbia Uni-

versity.

In addition to regular courses for extension students, the School of Practical Arts offers through the Institute of Arts and Sciences under the University Department of Extension Teaching many special lecture series at hours convenient to those interested. Such extension special lectures are open to men and women, require no examinations, and are not credited toward any certificate, diploma, or degree. Circulars concerning Special Classes in Practical Arts, giving descriptions

of courses, hours, and other information, may be obtained from the Sec-

retary of Teachers College.

UNIT COURSES

In addition to the regular courses of instruction, the School of Practical § 34 Arts offers each year a series of "Unit Courses," each consisting of ten lectures or demonstrations, with suggestions for supplementary reading. These short courses are intended to broaden the curricula of students who have not time for many regular courses outside their own majors. No credit will be given for such short courses, but they may be used in partial fulfilment of the requirements for the Master's degree (see §§ 11, 22).

They are open without charge to students who are registered for ten or more points per half-year. A card of admission must be obtained from the office of the Registrar. Certain short courses that are given every year are announced under departments in this bulletin; others are arranged and announced at various times during the college year.

The following unit courses have been planned in advance of publication

of this bulletin. Others will be arranged between September, 1919, and May, 1920, and announced on the bulletin boards of Teachers College and

in the Weekly Bulletin.

U 6-Social Hygiene and Sex-Education. April-May. M. and W.,

3.10. See § 36

U 44—Heredity and Eugenics. February-March. M. and W., 3.10. See § 36 U 41—Teaching of Industrial Arts in Elementary and Secondary Schools.

October-November. M., 7.30 p. m. See § 87 U 101—Elementary Facts of Embryology and Sex Physiology. February-March. M., 5.10. See § 36

U 105—Raw Materials of Food. November-December. M. and W.,

4.10. See § 44 U 106—Raw Materials of Clothing. December-January. M. and W.,

4.10. See § 44

U 107-Metal Industries. February-March. M. and W., 4.10. See

§ 44 U 110—The Mental Adjustments in Familial Relationships. Professor L. S. Hollingworth

COURSES OF INSTRUCTION

General Statement

1. For purposes of registration, most courses are designated by the name

of the subject followed by a number (e. g., Biology 3).

2. In general, odd numbers (e. g., Chemistry 3, Education A3) indicate courses or parts of courses given during the Winter Session (first half-year), but many such courses are repeated in the Spring Session (second half-year); even numbers, those given only during the Spring Session. Courses bearing both odd and even numbers connected by a hyphen (e.g., Chemistry 1-2) extend throughout the year and can ordinarily be entered only in September; students may enter such courses in February only when instructors approve and sign the registration cards.

The Roman numerals are applied in the same way to sections of courses. Thus Sections I, III, V, complete the course in the first half-year; II, IV, VI, in the second half; and I-II or III-IV extend through both half-years. This does not apply to the A and B courses in English, French, German, History, and Physical Training, all sections of which extend throughout

Certain fundamental courses in English, Education, French, German, History, Hygiene and Physical Training are designated by letters (e.g., Education A₃).

3. Courses designated by numbers from 1 to 100 are open to all qualified

undergraduates.

4. Courses in all subjects, except Education, numbered from 101 to 200, are open to seniors and graduates and may be counted for credit toward all degrees. Courses in Education numbered below 300 are open to qualified seniors with approval of advisers.

5. Courses designated by numbers above 200 (in Education, above 300) are open only to graduates, unless the Committee on Instruction gives

special permission to advanced students.

6. A "point" credit stands for one lecture or recitation per week for a half-year. A laboratory period of two hours equals one lecture. Each lecture or recitation requires on the average one and one-half hours of additional work, and each laboratory period requires one-half hour extra. In general, each point requires on the average two and one-half hours per week total time in lecture, laboratory, studio, library, and home work. These are averages for good students; others find it necessary to devote more time to preparation of lessons.

7. Courses marked "special" are not credited toward degrees, diplomas,

or certificates unless the value in points is stated.

8. Courses with x affixed to the numbers are supplementary courses. 9. Courses with A and B affixed to the numbers are alternative and may

be taken only as substitutes for the courses with the same numbers, unless the Committee on Instruction gives special credit.

10. Courses with a, b, or c affixed to the numbers are parts of more extensive courses bearing the same numbers.

GENERAL COURSES

General courses in Biology, Chemistry, Economic Science, Education, English, Languages, Geography, History, Hygiene, Mathematics, Physics, Psychology, and Social Science are described in §§ 36–52.

Technical courses in Fine Arts, Household Arts, Industrial Arts, Music, and Speech, Nursing and Health, and Physical Education are described in §§ 52-107.

BIOLOGY

Laboratory ticket: Students in all laboratory courses in biology are required to purchase from the Bursar a laboratory breakage ticket, good for all science departments, price \$2. Unused coupons are redeemable at the end of any Session. Limited sections: For all courses announced as "limited sections" students must reserve

places at the time of registration. See 4 in § 24.

Students who apply for exemption from required courses in biology on the basis of study previously completed at other colleges must submit note-books, names of text-books used, and brief outlines of the previous work.

Biology 3—Introduction to Biology. Recitations, lectures, and laboratory work. 4 points. Miss STACKPOLE and assistant

Tu. and Th., 2.10-5, Winter Session. Room 421 T. C. An elementary study of general biology, especially in its physiological aspects. Biology 4 and 57 should follow this course.

Biology 4L—Human Biology. Recitations, lectures, and laboratory work. 4 points. Miss STACKPOLE and assistant Winter Session:

Laboratory: Section I: M. and W., 2.10-4
Section III: W. and S., 9-10.50
Section V: Tu. and Th., 9-10.50
Lectures: W. and S., 11, or M. and W., 4.10; Tu. and Th., 11

Spring Session (course repeated): Laboratory: Section II: Tu. and Th., 8-9.50 Section IV: Tu. and Th., 10-11.50 Section VI: Tu. and Th., 2.10-4

Section VIII: W. and S., 9-10.50 Lectures: Tu. and Th., 9; or Tu. and Th., 4.10; or W. and S., 11 Limited sections. Room 421 T. C.

An introductory study of human structure, functions, development, and hygienic relations on a biological basis.

Biology 4x—Biology for Sex-Education. I point when taken supplementary to any course in hygiene or biology. Open only to women. Miss STACKPOLE

M., 5.10, Spring Session. Room 421 T. C.

A series of fifteen illustrated lectures and laboratory demonstrations dealing with the anatomical, physiological, embryological, and bacteriological facts of biology which are necessary for understanding sex-education.

Biology 51-52—Biological Nature-Study. Lectures, laboratory work, field work, and reading. 2 points each Session. Professor Broad-HURST and Miss STACKPOLE

M. and W., 3.10-5. Room 423 T. C.

This course is a general introduction to the nature-study of common animals and plants. The Winter Session is chiefly plant nature-study, while the Spring Session is largely devoted to animals. The names, life-histories, habits, relations to man, and other facts of popular interest concerning living things are emphasized. Trees and forestry, cultivated plants, wild flowers, birds, insects, domesticated animals, and other materials important in nature-study are selected for study. Both half-years are essential for teachers of nature-study and biology, but general students may register for either half-year.

Biology 53L—Biology Applied to Physiology. Lectures, readings, and laboratory work. 4 points. Miss STACKPOLE and Professor BIGELOW Winter Session:

Section I: M. and F., 9-11.50. Open only to nurses unless there are vacancies at noon on September 27

Spring Session (course repeated):

Section II: M. and F., 9-11.50. Requires twenty students Limited sections. Room 421 T. C.

A comparative biological study of the structure, function, and hygiene of the human organs concerned with digestion, circulation, respiration, metabolism, excretion, nervous, and muscular activity, and reproduction.

Prerequisites: Biology 3 or 4, or equivalent elementary biology and elementary chemistry.

Biology 57L—Elementary Microbiology (including Bacteriology). Lectures and laboratory work. 2 points. Professor Broadhurst and assistant

This half-year course requires (1) one lecture hour, (2) one demonstration and recitation hours, and (3) one two-hour laboratory period.

The hours for Sections I-VI are as follows:

(1) Lecture, F., 3.10, either Session. Room 423 T. C.

(2) Demonstration and recitation, W., 10, 11, or 1.10, either Session

(3) Laboratory sections I-VI:

Section I: Tu., 2.10–4, Winter Session Section II: M., 2.10-4, Spring Session Section III: F., 10–11.50, Winter Session Section IV: Tu., 2.10–4, Spring Session Section VI: Th., 2.10–4, Spring Session

Special Sections

Special Section VII: S., 9-11.50. For the convenience of part-time students the laboratory work and demonstration are both given on Saturday. Lecture, F., 3.10, unless special arrangements are made with the instructor. Winter Session only. Requires a registration of fifteen students. Special Section VIII: F., 9-11.50, lecture and laboratory. Demonstrates

stration, W., 10, 11, or 1.10. Spring Session only. Open to qualified nurses and others approved by the instructor before registration.

Limited sections. Room 423 T. C.

This course deals with bacteria, molds, yeasts, and other micro-organisms, selecting for most attention the forms which affect every-day life. The bacteriological problems of personal and public hygiene and sanitation are included. Many of the studies directly involve important problems of home economics.

Prerequisite: Elementary biological laboratory study.

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Biology 153-154—Special Problems in Applied Biology (including Bacteriology). 4 points each Session. Professors BIGELOW and BROAD-HURST

At least ten hours per week must be arranged with instructors before registration

Students may register in either or both Sessions, for advanced work in bacteriology, or for special problems in bacteriology, or other phases of applied biology. Graduate students in practical arts and educational biology who have not completed Biology 53 or 57 may arrange a combination of 53 or 57 and 153 or 154 with graduate credit.

Biology 253-254—Advanced Bacteriology Applied to Practical Arts. 4 points each Session. Professor Broadhurst

Instructor must be consulted before registration.

Biology 104—Biology in Education and Social Work. 2 points. Professor Bigelow and Miss Stackpole

M. and W., 3.10, Spring Session

A course which presents the leading facts and generalizations of biology—especially of evolution, heredity, embryology, and general physiology—which have important bearings upon education and social work. Several weeks of the course will be devoted to a survey of social hygiene and sex-education.

Unit Courses

(Ten lectures each, see § 34)

U6—Social Hygiene and Sex-Education. Professor BIGELOW, Miss STACKPOLE, and special lecturers

Section I (for women): M. and W., 3.10, last five weeks, Spring Session Section II (for men): Hours to be arranged, Spring Session

U44—Heredity and Eugenics. Professor BIGELOW.

M. and W., 3.10, first five weeks, Spring Session
U101—Elementary Facts of Embryology and Sex Physiology. Open to women who do not take Biology 4x. Miss STACKPOLE M., 5.10, first ten weeks, Spring Session. Room 421 T. C.

Summer Session Courses in Biology, 1919

Biology s104—Social Hygiene and Sex-Education. 2 points. fessor Bigelow, Miss Stackpole

Biology s4a—Biological Aspects of Social Hygiene. I point. fessor Bigelow, Miss Stackfole
Biology s57—Applied Bacteriology, Elementary. 2 points. Pro-

Professor Broadhurst

Biology s153—Biology Applied to Physiology and Hygiene.

points. Miss STACKPOLE and Professor BIGELOW

Biology s253—Problems of Applied Biology (including Bacteri-

ology). 3 points. Professor Broadhurst Nature-Study s1—Biological Nature-Study. points. Miss STACKPOLE and Professor BROADHURST

CHEMISTRY

Students in all laboratory courses in chemistry are required to purchase from the Bursar a laboratory breakage ticket, good for all science departments, price \$2. Unused coupons are redeemable at the end of any Session.

Limited sections: For all courses announced as "limited sections" students must reserve places at the time of registration. See 4 in § 24.

Students who apply for exemption from required courses in chemistry on the basis of study previously completed at other colleges, must submit note-books, names of text-books used, and brief outlines of the previous work.

There are four lines of chemistry in the School of Practical Arts-General Chemistry, Household Chemistry, Biological Chemistry, and Food Chemistry.

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GENERAL CHEMISTRY

Chemistry 1-2L—General Chemistry, Elementary. 4 points each Session. Professor Carpenter and assistants

Section I: Laboratory, M. and F., 10–11.50; lecture, 9 Section II: Laboratory, Tu. and Th., 3.10–5; lecture, 2.10 Laboratory, Room 402 T. C. Lecture, Room 200 T. C. Limited sections This course is intended only for students who have not already had a satisfactory course in elementary chemistry. Not open to students who have completed a year of chemistry in accredited high schools.

This course presents the primary facts and principles of chemistry. The illustrative material is taken, as far as possible, from the fields of industrial and household arts. The more common and useful substances are studied and many of them are prepared in the laboratory.

Chemistry 3L—Elementary Chemistry, Briefer Course. 4 points.

Miss Francis and assistant

Section I: Laboratory, Tu. and Th., 10–11.50, lecture, 9; Winter Session Section II: Laboratory, Tu. and Th., 10-11.50, lecture, 9; Spring Session

Section IV:* Laboratory, W. and S., 10–11.50, lecture, 9; Spring Session Section V:* Laboratory, W. and S., 10–11.50, lecture, 9; Winter Session * Sections IV and V are primarily for nurses: other students must consult the instructor

before registering.

This briefer course, selected from Chemistry 1-2, is intended for students of fine arts, physical education, music, household administration, clothing, and other majors which do not require Chemistry 51 and Nutrition 71. Chemistry 3 prepares students for Chemistry 23, but not for Chemistry 31 and 41, for which the prerequisite is Chemistry 1-2, 5-6, or 3 supplemented by 2.

Chemistry 5—General Chemistry, Intermediate. 4 points. Professor Carpenter and assistants

Section I: Laboratory, M. and W., 2.10-4; lecture, 4.10, Winter Session Section II: Laboratory, W., 4.10-6, F., 3.10-5; lecture, W., 3.10, F., 2.10, Winter Session

Section III: Laboratory, M. and W., 2.10-5; lecture, 4.10, Spring

Session

This course is intended for students who have completed elsewhere an elementary course equivalent to the year courses given in accredited high schools. If Chemistry 5 is completed with high standing, the student will be automatically exempted from Chemistry 6 and admitted to Chemistry 31 or 41; otherwise Chemistry 6 must be taken in preparation for 31 or 41.

Chemistry 6-Intermediate Chemistry, Continued. 4 points. Professor Carpenter and assistants

Laboratory, W., 4.10-6, F., 3.10-5; lecture, W., 3.10, F., 2.10, Spring Session

Summer Session Courses in General Chemistry, 1919

Chemistry s1—General Chemistry for Students in Practical Arts. 4 points. Professor CARPENTER and assistant

Chemistry s5—Intermediate Chemistry. 4 points. Professor CARPENTER

HOUSEHOLD AND ORGANIC CHEMISTRY

Chemistry 23L—Brief Course in Household and Food Chemistry. Lectures and laboratory work. 4 points. Miss Francis and assistant Section I: M. and W., 2.10-5, Winter Session. Repeated as

Section II, Spring Session

Limited sections

This brief course, preparatory to Nutrition 2, is intended for students of nursing, household administration, clothing, and hygiene who have not time for all the courses of the

series, Chemistry 1-2, 31 or 41, 51, Nutrition 71, which are required in majors in cookery and nutrition. It will include selections from Chemistry 31, and cannot be credited in addition to 31 or as a substitute for that course.

Prerequisite: Chemistry 3 or equivalent.

Chemistry 25—Food Industries. Lectures, readings, and demonstrations, varied with excursions to manufacturing establishments and reports on the processes inspected. 3 points. Professor Vulte and Miss

Section I: Tu. and Th., 10-11.50, Winter Session. Repeated as

Section II, Spring Session. Room 411 T. C. Section III: M. and F., 10–11.50, Winter Session. Repeated as

Section IV, Spring Session. Room 400 T. C.

The lectures describe the preparation of the various staple foods, from the raw state to the finished product in marketable form, and include a discussion of the composition and cost of the available materials. Among the various subjects considered are the cereals, flours, meals, starch, bread, sugars, edible oils, animal and dairy products, tea, coffee, chocolate, alcoholic beverages, spices and condiments. The processes of drying, salting, smoking canning, and preserving are described. Adulteration and substitution are also

Prerequisite or parallel: A course in general chemistry.

Chemistry 31L—Household Chemistry and Introduction to Organic. Lectures and laboratory work. 4 points. Professor Vulté, Miss Vanderbilt, and Mrs. McGowan

Section I: Tu. and Th., 9-11.50, Winter Session. Repeated as

Section II, Spring Session

Section III: Tu. and Th., 2.10-5, Winter Session. Repeated as Section IV, Spring Session
Limited sections. Room 405 H. A.

This course includes (a) laboratory study of composition, properties and purification of water; effect of various cooking utensils on food products; economy of fuels; carbohydrates, testing of flour, meals, cereals, fruits, and similar products; fats, soap-making, soap powders, scouring agents, and polishes; proteins, examination of eggs, meat extracts, gelatine, milk, and cheese; baking powders; tea, coffee, and cocoa; (b) lectures, demonstrations, and recitations on important organic compounds of the aliphatic and aromatic series, such as hydrocarbons, alcohols, aldehydes, ketones, acids, esters, amines, amides, amino acids, purin bases, etc.

Prerequisite: General chemistry equivalent to Chemistry 1-2. Chemistry 3 does not

admit to 31. Chemistry 25 is a desirable supplement to 31.

Chemistry 41—Elementary Organic Chemistry. Lectures, recitations, and laboratory work. 4 points. Mrs. McGowan Section I: M. and F., 9-11.50, Winter Session. Repeated as

Section II, Spring Session

This course is designed for students who intend to specialize in biological chemistry, cookery, and nutrition.

Prerequisite: Chemistry 1-2.

Chemistry 81-82—Household Analysis, Inorganic. Laboratory work. 4 points each Session. Professor Vulté

W. or F., 2.10-5, and other hours to be arranged; total, eight hours per

week

A systematic introduction to methods of chemical analysis of inorganic compounds which enter into the composition of common household materials.

Prerequisite: Chemistry 1-2, 31 or 41. Chemistry 51 may be parallel.

Household Arts 121-122—Household Chemistry, Advanced. Lectures and laboratory work. 3 points each Session. Professor Vulté and Miss Vanderbilt

W. and F., 2.10-5. Room 412 H. A.

This course offers an opportunity to advanced students for special study of household materials, such as foods, water, leavening agents, detergents, textile fibers and fabrics, etc. Prerequisites: Chemistry 31 or 41 and 51.

Textiles 31cL—Textile Chemistry. 1 point. Mrs. McGowan. See under Textiles § 68

Summer Session Courses in Household and Organic Chemistry, 1919

Chemistry s25—Food Industries. 3 points. Professor Vulté and assistant

Chemistry s31—Household Chemistry. 4 points. Professor Vulté and Mrs. McGowan

Chemistry s31a—Lectures. 2 points. Professor Vulté and Mrs.

Household Arts s121—Household Chemistry, Advanced. 3 points.

Professor Vulté

Textiles s31c-Textile Chemistry. I point supplementary to any course in textiles and clothing. Mrs. McGowan and assistant

BIOLOGICAL CHEMISTRY

Chemistry 51L-Physiological Chemistry. Lectures, conferences, and laboratory work. 4 points. Professor Gies, Dr. Eddy, Dr. Heft, and assistants

Section I: M. and F., 3.10-5, Winter Session. Repeated as

Section II, Spring Session Section III: Tu. and Th., 10–11.50, Winter Session. Repeated as

Section IV, Spring Session

Laboratory, Room 403 H. A.

Lectures, all sections, Tu., 5.10. Room 400 T. C. Recitations, one group, W., 5.10; another group, F., 2.10

Limited sections

The chemistry of cellular nutrition, including chemical constituents of cells, chemistry of foods, digestion, absorption, assimilation, tissues, and excretions.

Prerequisites: Chemistry 1-2 and 31 or equivalents, in general and organic chemistry; Biology 4 or 53 or equivalent in general biology and physiology.

Graduate students should register for Household Arts 225; see below.

Chemistry 51x—Biochemistry of Nutrition in Disease. Lectures and readings. I point supplementary to Chemistry 51. Professor GIES M., 5.10, Spring Session

This course will present the chemical facts pertaining to abnormal nutritional processes. The causes of leading types of abnormalities, as well as the chief factors in the prevention and control of diseases, and the alleviation of their effects, will be discussed under such heads as inflammation, degeneration, resistance, infection, immunity, tolerance, dental disease, anemia, tuberculosis, dyspepsia, typhoid fever, jaundice, Bright's disease, diabetes, gout, rheumatism, intoxication, nervous disorders, and analogous subjects.

Prerequisite: Chemistry 51.

Household Arts 127L—Methods of Biochemical Analysis. Lectures and laboratory work. 4 points. Dr. HEFT

Lecture, Tu., 9, Spring Session

Laboratory hours to be arranged. Room 403 H. A.

Limited sections

This course prepares the student for experimental work in general nutrition. It is confined to a study of the origin and significance of the substances of greatest importance in metabolism. The laboratory work includes qualitative and quantitative urinary analysis, the student receiving instruction in methods for the determination of total nitrogen, ammonia, urea, creatin, creatinin, uric acid, indican, chloride, sulphate, phosphate, pathological constituents, etc. Prerequisite: Household Arts 225.

Household Arts 225-Physiological Chemistry. Lectures, recitations, and laboratory work. 4 points. Professor GIES, Dr. EDDY, and Dr. HEFT

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Section I: Tu. and Th., 3.10-5, Winter Session. Room 403 H. A. Lecture, Tu., 5.10. Recitation, Th., 5.10
Section II: S., 9-12.45, Spring Session. Recitation, Tu., 4.10; lecture,

Tu., 5.10

This course is designed for graduate students who plan to specialize in nutrition or biological chemistry. The course presents the essential chemical facts pertaining to life processes. The composition and nutrition of the cells as the units of structure and the centers or agents of biological power and activity are studied prior to determination of the centers or agents of biological power and activity are studied prior to determination of the ways in which the higher plants and animals prepare and utilize nutrient materials and reject waste products in their growth, repair, reproduction, and self-preservation. The laboratory work includes studies of carbohydrates, lipins, proteins, enzymes, and other cell constituents; blood and lymph; essential and "accessory" food substances; the various types of digestions, and the chemistry of the leading tissues and urine.

Prerequisites: Chemistry 31, 41, or approved organic chemistry and Biology 4 or 53.

Household Arts 227-228—Research in Biological Chemistry. 4 points each Session. Professor GIES, Dr. EDDY, and Dr. HEFT

Requires not less than 10 hours per week in either half-year. Not open

to undergraduates.

Certain advanced courses in Biological Chemistry are given in the laboratories of the Columbia University School of Medicine and are open, with the approval of Professor GIES, to qualified graduate students of Practical Arts.

Summer Session Courses in Biological Chemistry, 1919

Chemistry s51—Physiological Chemistry. GIES and Dr. HEFT 4 points. Professor

Household Arts s225-Physiological Chemistry. 4 points. Professor GIES and Dr. HEFT

FOOD CHEMISTRY

The courses described under Nutrition and Food Economics (§ 67) include the principles and applications of food chemistry.

ECONOMIC SCIENCE

§ 40 Economic Science 1—Principles of Economics. 3 points. Professor Andrews and Dr.

Section I: M., W., F., 2.10, Winter Session. Repeated as Section II, Spring Session. (Professor Andrews)

This course aims to acquaint students with the modern industrial world by analyzing its general conditions in terms of economic principles; the subjects of consumption, production, and distribution are studied to discover the principles underlying the use of wealth, the production of goods by the co-operation of land, labor, capital, and management, and the distribution of the products of industry into rent, wages, interest, and profits.

This course is not open to Freshmen.

Economic Science 79—Household Economic Science. 2 points. Professor Andrews and Miss McKeown

Section I: M. and W., 4.10, Winter Session (Miss McKeown). Repeated

Section II, Spring Session (Professor Andrews)

Deals with the organization and control of family and personal life through the economic relations of the household. The family income and its expenditure, including the following topics: The income, its source, and the equivalent of income in productive labor within the household; family expenditures and their regulation; the budget system; the items of the budget as measures of standards of living; necessaries for efficient living—shelter, food, clothing, and personal life; house ownership versus rental; house maintenance, furnishings, and equipment; operating expenses and the cost of cleanness; the cost of food and clothing; the personal life as reflected in personal expenditure; thrift, methods of saving, as savings banks, investments, and insurance-life, accident, and fire.

Economic Science 81—Household Accounts. 2 points. Professor ANDREWS

Tu. and Th., 3.10, Spring Session

Household accounting for the teacher, house manager, and consultant.

Practical Arts 164—Economic Problems. The Worker and the Community. Lectures, readings, and reports. 2 points. Professor Andrews

(Not given in 1919–1920)

This course approaches problems of work and livelihood from the personal point of view as to contacts between the individual and the economic situation. It discusses conditions which make for personal efficiency in the producer and for a satisfactory living for the consumer; the social conditions which make for welfare are analyzed and the individual's opportunity to contribute to general progress; it is particularly planned for the practical arts worker and teacher.

Household Arts 165—The Household in Economic Production. Lectures, reports, and discussions. 2 points. Professor Andrews Tu. and Th., 2.10, Spring Session

Detailed study of economic production, inside the household and out, as regards the goods and services needed by the family. The productive work of the household and its efficient organization by the housewife, by hired workers—the domestic service problem; the transfer of housework to outside industry; industries that serve the home; proposed co-operation—in buying, in living; municipal enterprises and the household; the household and the market.

Prerequisite: Economic Science 79, or general economic or social science.

Household Arts 166-Household Budgets. Lectures, reports, and discussions. 2 points. Professor Andrews

(Not given in 1919-1920)

The available data on household expenditures is considered in detail, including historical and comparative studies in other countries, as well as the recent investigations in the United States; methods of recording personal expenses, making surveys of household expenditures, and collecting budgets; use of budget facts, statistical and graphic methods; principles of economic consumption.

Prerequisite: Economic Science 79, or general economic or social science.

Household Arts 266—Problems of Household Economic Science. Lectures, reports, and discussions. 3 points. Professor Andrews F., 3.10, and conference hours, Spring Session

The course affords opportunity for graduate students in household arts to follow individual problems in the economic and social aspects of the household and family group. It includes a critical examination of household studies and surveys as already made; reports on assigned readings and library and field investigations of problems such as the general purpose of the household, its economic and social relations, the city family, the rural family, the family in relation to the state, education, and to industry.

Prerequisite: Household Arts 165-166. Graduate study of household economics, or

economic or social science.

Practical Arts 301-302—Introduction to Research in Economic and Social Problems Related to Practical Arts.

(Not given in 1919–1920)

This course, which for two years has been conducted by the late Dr. May Allinson, is planned for graduate students who wish practical training in the principles and methods of scientific investigation.

Practical Arts 158A—Thrift, Savings, and Investment. 2 points. Mr. Breckenridge

S., 9-10.50, Spring Session

This course for students of Practical Arts is the same as Education 158A in the School of Education.

The course will include a study of the methods of presenting thrift in the schools in connection with the various school subjects, especially in arithmetic and in high-school mathematics; a study of War Savings and Thrift; Liberty Bonds; the various agencies for promoting thrift through saving money such as savings banks, postal savings, building and

§ 4I

loan associations, co-operative banks; the methods of investing money such as real estate, stocks, bonds, with a study of the relative desirability, safety, and yield of the several types of investment securities; thrift through economical buying by taking advantage of various forms of cash and trade discounts; thrift in borrowing money so as to avoid excessive interest rates including borrowing from bank, loan societies, the Morris plan, loan sharks; thrift through provision for emergencies and for old age by means of life insurance, endowment insurance, health and accident insurance, annuities and life incomes.

Summer Session Courses in Economic Science, 1919

Administration s79—Household Economics, Introductory Budget Course. 2 points.

Household Arts s166—Household Budgets. 2 points.

EDUCATION

Note—Students who expect to teach after graduation from the School of Practical Arts should elect in the Junior year Education A3 and 2 (each 4 points), and in the Senior year Education B3-B4 (4 points) and a special methods course (6 points) in the teaching of some phase of practical arts. These education courses are required of all undergraduates who are candidates for diplomas in teaching practical arts.

Education A3—Elements of Psychology for Teachers. 4 points. Professors Ruger, Whitley, Hollingworth, and McCall

M., W., Th., F., I.Io, Winter Session. (See A4 below, Spring Session.) Sections V, VII, IX, XI, and XIII will be organized for Practical Arts

Sections I to IV are sections of Education A2 (3 points) for students of Barnard College and Columbia College. See Announcements of these colleges.

Education A3 is prerequisite to all advanced courses in education for students in the School of Practical Arts. It is intended for Juniors, and should be followed in the Spring Session by Education 2, or the first half of Education 2 (Education 2a) may be taken parallel in the Winter Session.

Education A4—Equivalent to Education A3. 4 points M., W., Th., F., 1.10, Spring Session

Education 19—Applications of Psychology to Teaching. 2 points. Professor Whitley

Section I: M. and F., 9, Winter Session Section III: W. and S., 9, Winter Session

Education 19 is intended for students who have studied in college or normal school courses of psychology briefer than Education A3, and who are exempted from 2 points of Education A3.

See also the list of courses in Educational Psychology in the Announcement of the School of Education. Education 255-256 and 251-252 are courses of special value to prospective teachers of the technical subjects.

Education 2a—Principles of Teaching. Lectures, required readings, lesson plans, observation, and criticism of lessons. 2 points. Mrs. Moss-MAN

Section I: M. and Th., 1.10, Winter Session Section II: M. and Th., 1.10, Spring Session

This course is intended for Juniors with majors in education in the School of Practical Arts. It will deal with the development and formulation of the fundamental principles of teaching as these principles are seen in special lessons taught in the elementary grades. Strayer's *The Teaching Process*, and Norsworthy's and Strayer's *How to Teach* will be used as basal references

Section I and Education A3 may be taken parallel in the first half of the Junior or Senior years.

Education 2b-Application of Teaching Principles to Practical Arts. Lectures and observations. 2 points. Professors Bonser and WHITLEY, and Mrs. Mossman W. and F., 1.10, Spring Session

This course supplements Education 2a and presents the special applications of the principles of instruction most significant in teaching technical subjects.

Prerequisites: Education A3 or an equivalent course.

Prerequisite or parallel: Education 2a or equivalent.

Education B3-B4—History of Education, with special reference to Practical Arts Education. 2 points each Session. Professors Goodsell and Reisner

Section I: M. and W., 1.10 Section II: M. and W., 1.10 Section III: W. and F., 1.10 Section IV: M. and F., 1.10

This course is intended for Seniors in the School of Practical Arts. Graduate students should register for Education 42I-422. The purpose of the course is to present the essential features of the educational thought of the past as this has been shaped by economic, social, political, and religious causes. Emphasis will be laid upon industrial organizations and forces in their relation to educational theory and practice.

History of Education, advanced courses. See Announcement of the School of Education

Education 283 or 284—Supervised Observation and Teaching in the Secondary School. 2 points either Session. Professor STEVENS and assistants

Conference: F., 4.10

Graduate students of practical arts education who wish credit for observation and teaching in secondary schools in connection with Education 135–136 (Household Arts); 111–112 (Fine Arts); 147–148 (Industrial Arts); 161–162 (Music); and 189–190 (Physical Education) should register for Education 283 in the Winter Session, or 284 in the Spring Session, attend the conferences on Friday at 4.10, and also complete the practical work assigned to Seniors who register for the supplementary courses Education 136x, 112x, 148x, 162x, and 190x.

Education 181—School and Community Festivals. Lectures, discussions, and practical work in planning festivals and organizing committees. 2 points. Professor LATHAM, assisted by Professors WOOD, FARNSWORTH, DOW, ABBOTT, and VAN ARSDALE, and Miss COLBY, Miss WILMOT, Miss NORTHRUP, Miss DILLER, and Miss BEAUMONT

W. and F., 4.10, Winter Session

The lectures take up the problem of 'estival making in schools and communities and show possible ways of solving them to the further educational and social ends. Especial attention is given to available sources of material for the art forms involved, and original effort is fostered. The student's reading is limited to his immediate needs and interests, and does not cover the subject historically, except for those desiring to acquaint themselves with some chosen period or people. Opportunity is given for practical work in the Teachers College Festival.

College Festival.
Fine Arts 182—Art design for school and community festivals, is recommended to students who take Education 181. See under Fine Arts, §58.

Education 182—Dramatization. Professor Latham. Spring Session. See § 94

Graduate students with major interest in practical arts education should consider including in their programs some general courses in education. For details, see Announcement of the School of Education, and a special bulletin for graduate students with majors in practical arts.

Technical Education—For courses in the teaching of various phases of practical arts, see the courses in education under the statements of Fine Arts, Household Arts, Industrial Arts, Music, Nursing and Health, and Physical Education

Teaching of Natural Sciences—Numerous relations of the natural sciences to practical arts are included in the courses in teaching biology, geography, nature-study, general science, and physical sciences. See the Announcement of the School of Education

Summer Session Courses in Education, 1919

NOTE—Education sAa and sAb (each 2 points) are together equivalent to Education A; Education sBa and sBb (each 2 points) to Education B; and Education s2a and sBc may be substituted for Education 2.

Education sAa—Educational Psychology. 2 points. Professor Ruger Education sAb—2 points. Professor WHITLEY

Education sBa—History of Education in Modern Times. 2 points. Professor Monroe

Education sBb—History of Education in Modern Times. 2 points. Professor Goodsell

Education sBc—Principles of Education. 2 points. Professor REISNER

Education s2a—Principles of Method. 2 points. Professor Maddox

ENGLISH

§ 42 English A1-A2L—Composition and Literature. Lectures, themes, reports, and required readings. 3 points each Session. Professor Abbott, Miss Diller and Miss Hall

Section I: M., W., F., 9
Section II: M., W., F., 10
Section IV: M., W., F., 10
Section IV: M., W., F., 1.10
Section VI: M., W., F., 2.10
Limital Additional Control of the Limited sections

This course is planned to train the student in the oral and written expression of his thought and to enrich his thought by the study of a selected body of poems, essays, and

The composition practice, oral and written, is occupied chiefly with topics in the field of the individual student's work and interests, and aims to train him in the use of sources, in invention, and in selection and arrangement of material. Some oversight will be given to the written work required by other departments.

Students who need training of the voice will be advised to take Speech 1-2

English B1-B2L—Composition and Literature. Lectures, themes, reports, and readings. 3 points each Session. Professor Cook, Miss Hill, and Miss DILLER

Section I: M., W., F., 11
Section II: M., W., F., 11
Section III: M., W., F., 3.10
Section IV: M., W., F., 3.10
Section V: Tu., 10; Tu. and Th., 11 Section VI: Tu., 10; Tu. and Th., 11 Limited sections

This course carries further the purpose and training offered in English A. The composition practice aims to train the student in systematic thinking in topics of interest to him, particularly in the field of his major studies. Brief addresses and oral reports; classroom exposition; papers and reports; the literature of special subjects as sources of material; the selection and use of material in special articles.

The literature studied is selected from writers who embody the more complex problems of life and society as they are rendered in the novel and drama.

English C—Supplementary English Composition. Professor Cook and others

Individual conferences at hours to be arranged

No credit in points, but required for graduation of all students who are assigned to this work by the Committee on Instruction because of special weakness shown in oral or written work in any departments. A student required to register for this work will not be reported as passed until the Committee is satisfied that creditable proficiency in the use of English has been attained. No fees will be charged. FRENCH 53

English 1-2—Composition. 2 points each Session. Professor Abbott (Not given in 1919–1920)

The instructor must approve registration for this course.

Students admitted with advanced standing, with a requirement of 70 points or less, may substitute this course and a four-point elective in literature for English A and B. This substitution may not be made by students admitted to the School with more than 70 points required.

The course comprises the elements of good writing, the use of library reference books the preparation of manuscript for the printer, and the oral and written presentation of topics within the field of each student's major.

Practical Arts 112—Writing for Publication. 3 points. Professor ABBOTT

Hours to be arranged

Journalistic writing, including the preparation of bulletins and published reports within the field of the Practical Arts majors.

This course will be given if fifteen or more students apply before the close of the February

registration period

Prerequisite: High standing in English B, and the endorsement of the department of the student's major interest.

English 71-72—Nineteenth Century Writers. Recitations, conferences, and reports. 2 points each Session. Professor BAKER and Miss HILL Tu. and Th., 2.10

The culmination of the romantic movement in Wordsworth, Coleridge, Byron, Scott, Keats, and Shelley. Their themes and artistic methods. English prose as represented in Lamb, Hazlitt, Carlyle, Macaulay (first half-year). Tennyson, Browning, Rossetti, Matthew Arnold, and Clough. English prose as represented in Ruskin, Matthew Arnold, and Stevenson; English fiction in Scott, Austen, Thackeray (second half-year). See Teachers College Syllabus A6.

Prerequisites: English A and B.

English 75—Typical Forms of Literature; Poetry. Lectures, discussions, reports, and assigned readings. 2 points. Miss DILLER

(Not given in 1919-1920)

Poetry of various types, lyric, narrative, and reflective, including that of contemporary poets, will be considered with respect both to the art of versification and to the ideals embodied.

English 76—Typical Forms of Literature; Drama. 2 points. Professor Abbott

M. and W., 4.10, Spring Session

In 1920 this course will be given chiefly to a study of Shakespeare; most of his plays will be read with reference to social background, characterization, dramatic art, and poetry. Prerequisites: English A and B.

English 77–78—American Literature. Lectures, discussions, reports, and assigned readings. 2 points each Session. Professor Cook

Tu. and Th., 3.10

A survey of American literature with special reference to the development of national ideals from the colonial period to the present time. Special attention will be given to the development of the more important types of contemporary literature.

Oral English—See courses in Speech, § 94

Education 181—School and Community Festivals. See § 41

FRENCH

French A1-A2L—Elementary French. 6 points. Professor BAL-LARD, Dr. HARVITT, and Mr. ATKINSON

Section I: M., W., F., 9 Section II: M., W., F., 9 Section III: M., W., F., 8

Section IV: Tu., Th., S., 9 Section V: M., W., F., 2.10 Section VI: M., W., F., 1.10 Section VII: M., W., F., 1.10 Limited sections

This course aims to secure a command of elementary spoken and written French. The work consists of grammatical studies, phonetic drill, oral exercises, and translation. Textbooks: Beginners' French—Walter and Ballard; Short Stories for Oral French—Ballard; Elementary History of France—Josselyn and Talbot; A French Reader—Ballard; Phonetic French Reader—Ballard and Tilly.

French B1-B2-Intermediate French. 6 points. Professor BALLARD and Dr. HARVITT

Section I: M., W., F., 10 Section II: M., W., F., 10 Section III: Tu. and Th., 4.10-5.30

This course continues French A. Text-books: Beginners' French—Walter and Ballard; Short Stories for Oral French—Ballard; Phonetic French Reader—Ballard; Composition—Francois; L'Abbé Daniel—Theuriet; Contes Divers—Harvitt; La Mare au diable—Sand. Students deficient in pronunciation will be required to do special work in French sounds. Students who have not completed within a year French A1-A2, or its equivalent, may repeated by the state of the French Br. valents in the state of the

not register for French BI, unless the instructors give approval.

GEOGRAPHY

§ 44 Geography 105-106—Industrial and Commercial Geography. Lectures and library work. 2 points each Session. Professor McFarlane and Mr. Lehnerts

M. and W., 4.10

The first part of the course will deal with the distribution of raw materials, the laws of commerce, and the world highways. The second part will consist of a detailed study of the leading commercial nations of the world, with especial emphasis upon the commerce of the United States. Smith's Industrial and Commercial Geography, and assigned readings.

Unit Courses

(Ten lectures each, see § 34)

U105—Raw Materials of Food. Second ten lectures of Geography 105. Professor McFarlane

M. and W., 4.10, Winter Session

U106—Raw Materials of Clothing. Last ten lectures of Geography 105. Professor McFarlane

M. and W., 4.10, Winter Session

U107—Metal Industries. First ten lectures of Geography 106. Professor McFarlane

M. and W., 4.10, Spring Session

GERMAN

German A1-A2—Elementary German. Reading, grammar, work in hearing and speaking. 3 points each Session. Mr. BACH § 45

M., W., F., 2.10

The aim of this introductory course is to teach students the elements of German grammar and to read easy German prose. Simple exercises in hearing and speaking will also be emphasized.

German B1-B2—Intermediate German. Reading, including much sight reading, grammar, work in hearing and speaking. 3 points each Session. Mr. BACH

M., W., F., 1.10

This is a continuation of German A, and is intended to give added facility in reading simple German prose, some of which will be chosen to meet the needs of students in their work in the School. Oral practice and composition will also be emphasized.

German C1-C2-Conversation and Composition. 2 points each Session. Mr. BACH

(Not given unless ten students apply before registration)

The main emphasis in this course will be put on oral practice and composition. It may be taken with German B.

HISTORY

History A1-A2L-Modern and Contemporary History. Lectures, discussions, and readings. 3 points each Session. Miss Townsend

Section I: M., W., F., 9 Section II: M., Tu., Th., 10 Section III: M., W., F., 11 Limited sections

Beginning with a survey of the most important changes that mark the transition to modern times, this course is devoted chiefly to the history of Europe from the eighteenth century to the present. Among the principal topics are the commercial and religious revolutions of the sixteenth century; growth of national states; characteristics of the Old Regime, and great political, economic, and social changes wrought by the French Revolution, the Napoleonic regime, and the Industrial Revolution; growth of democracy and nationalism; spread of European civilization; imperialism, international relations and rivalries; underlying causes of the Great War, and problems of reconstruction. The general purpose is to study the historical development of current national and international conditions and architecture.

conditions and problems.

This course is intended primarily for Freshmen, Sophomores, and Juniors. Seniors and

unclassified professional students should register for History A3-A4.

History A3-A4—Modern and Contemporary History. For Seniors and other advanced students. Lectures, discussions, and readings. 3 points each Session. Miss Townsend

M., W., F., 1.10

This course is similar to History A1-A2 (see above), but devotes a larger part of the time to the nineteenth and twentieth centuries, with special emphasis on the conditions out of which developed the Great War and its accompanying problems.

This course is open only to Seniors and mature students who enter the School as unclassified professional students or above the Junior year.

History B1-B2-Social History of Industry. Lectures, discussions, and readings. 3 points each Session. Professor Gambrill and assistant Section I: M., W., F., 9
Section II: M., W., F., 11

A general view of the industrial development and accompanying social changes in Western Europe and America with special reference to England and the United States. After a brief study of primitive and ancient societies and the conditions influencing progress, the course deals with the agricultural, industrial, commercial, and social systems of the Middle Ages, and the transition to modern times; the Commercial Revolution and its consequences, coming of the age of invention, machinery, and applied science, with the resulting transformation of society and emergence of the great industrial and social problems of to-day. Special attention is devoted to the story of the workers—their status in society, their problems, their organizations, and their efforts for emancipation and advancement.

This course is intended for Sophomores and Juniors. Not open to Freshmen.

Seniors may take History 145-146.

History 145-146-Social and Industrial History of the United States. 3 points each Session. Professor GAMBRILL

Tu. and Th., 3.10. Room 418 T. C.

The purpose of the course is to study the origin and development of current social and industrial conditions in the United States, with special reference to changing problems in education and social reform. Among the topics studied are the beginnings of America as a part of the overseas expansion of Europe and the consequent Commercial Revolution; development of an American people, their distinctive traits and ideals; agricultural progress; age of machinery, power, and applied science, revolutionizing modern society; rise and inter-relations of great industries and transportation systems; capitalism and growth of "Big Business"; labor unions, socialism, and anarchism; changing status of women; modern democracy, its progress and phases in the United States.

§ 47

Education 221—History of the Family as a Social Institution. 2 points. Professor Goodsell

Tu. and Th., 4.10, Winter Session

The first part of the course is designed to afford an historical survey of the evolution of the family from primitive times to the age of the Renaissance. The patriarchal type of family organization as it developed in Palestine, Greece, and Rome, and the influence of Christianity upon family life and ideals will receive special attention. The economic and social causes leading to the modern type of family organization as it exists in England and America will next be considered. Finally an analysis will be made of the conditions and problems of the twentieth-century family. Throughout the course the students will be encouraged to formulate a tentative philosophy of the home in its relation to community life.

Education 222-Education of Women: History and Present Problems. 2 points. Professor Goodsell

Tu. and Th., 4.10, Spring Session

The first part of the course will be devoted to a brief historical review of the education of women among the leading nations of ancient and modern times as that education was determined by the social and economic status of women. This historical survey will be merely introductory to a study of the present educational situation with special reference to the problems growing out of the higher education and the specialized training of women.

History of Art—See Fine Arts 69-70, under Fine Arts, § 54

History of Cookery—See Cookery 90, under FOODS AND COOKERY, § 65 History of Costume—See Clothing 33, under TEXTILES AND CLOTHING,

§ 68

History of Education—See Education B, under Education, § 41

History of Music—See Music 21-22, under Music, § 89

History of Nursing—See Nursing 21-22, under Nursing and Health, § 97

HOUSEHOLD ARTS

For courses in Household Arts, see under Technical Courses, §§ 62-80

HYGIENE

Hygiene A-Personal Health and Conduct. 2 points. Professor Wood and others. See description under Physical Education, § 101

Hygiene 72—Personal and General Hygiene. Lectures, recitations, and required readings. 2 points. Professor WILLIAMS
W. and F., 11, Spring Session

This course is intended for advanced students and is not open to Freshmen and Sophomores. It will consider the principles of hygiene, both personal and general, and their practical application to everyday life.

Hygiene 75—Sanitary Science. Lectures and demonstrations. points. Professors WINSLOW and BROADHURST

Lecture, M., 4.10-5.30, Winter Session Recitation, W., 5.10-6, Winter Session

This course includes a general survey of the fundamental principles of sanitary science and disease prevention and their application to water supply, milk and general food supply, disposal of sewage and garbage, air supply, the problems of tenement and factory sanitation, and the spread and control of infectious diseases. Brief attention will also be given to the problems of rural hygiene, the preventive factors in constitutional disease, personal hygiene, and the social and economic aspects of health problems. The functions and methods of boards of health will be discussed and the use of vital and sanitary statistics.

Recommended preparatory at parallel course. Biology 57.

Recommended preparatory or parallel course: Biology 57.

Hygiene 175—Sanitary Science (for graduate and advanced students). 2 points. Professors Winslow and Broadhurst

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Lecture, M., 4.10–5.30, Winter Session Recitation, F., 4.10–5

This is a special section of Hygiene 75 (see above), open only to graduate students and those who obtain the consent of the instructor before registration.

The required book for this section is Rosenau's Preventive Medicine and Hygiene.

Prerequisite: Biology 57 or its equivalent.

Hygiene 76—Industrial Hygiene. Lectures and field work. 2 points. Professor Winslow

M., 4.10-5.30, Spring Session. Hours for field work 3.10-6 on six Mon-

days during the Session

This course deals with the dangers to life and health in factories and workshops, and with the practical work of sanitary inspection as applied to industrial establishments. It will include a brief discussion of factory accidents, a consideration of industrial poisonings from lead, phosphorus and other metals, and from the inhalation of noxious gases, and with the effect of factory dust and vitiated air upon health, and particularly upon the prevalence of tuberculosis. Emphasis will be laid upon possible preventive measures and the inspection work will furnish a basis for judging sanitary conditions.

Hygiene 77—Public Health Administration. Lectures and discussions. 2 points. Dr. BOLDUAN

M., 1.10, Spring Session

This course, designed especially for public health nurses, will deal with the principles of preventive medicine and hygiene as practically applied in modern public health administration. The organization and functions of a modern health department will be considered in detail, and the powers and duties of federal, state, and local health authorities respectively will be discussed. Throughout the course an effort will be made to present so clear a picture of the evolution of modern public health activities that the student will be enabled to take an active part in the further development of this important field of social progress.

Household Arts 185-186—Public Health Investigation. 2 points each Session. Professor Winslow

Hours to be arranged, probably M., 2.10 or 3.10

This course is intended to enable properly qualified graduate students to conduct under direction advanced original investigation of public health problems.

For the following related courses, see under Biology, § 36

Biology 4x—Biology for Sex-Education

Biology 57—Microbiology

Biology 153—Advanced Bacteriology

For the following courses, see under Physical Education, §§ 101-107

Education 183-184—Educational Hygiene

Education 187–188—Hygiene of Childhood and Adolescence

INDUSTRIAL ARTS

For courses in Industrial Arts, see under Technical Courses, §§ 81-87

LANGUAGES

See English § 42, French § 43, German § 45, Latin § 48, Spanish § 51

LATIN

Latin A1-A2—Beginning Latin for Practical Arts Students. points each Session. Professor Lodge and Mr. Bach

Intended for those students who desire a non-technical acquaintance with the fundamental facts of the Latin language, especially in its relation to English, and some glimpse of Latin literature and civilization.

Latin 1—Latin Literature. 2 points. Professor Lodge Hours to be arranged before registration. Spring Session

Selections from the Latin poets, comprising the most important short poems of Catullus, Vergil, Horace, Tibullus, Propertius, Seneca, Martial, etc., read with a view to their literary value and their influence upon English writers.

Latin 2—Scenes from Roman Public and Private Life. 2 points. Professor Lodge

Hours to be arranged before registration. Spring Session

Selections from the Roman authors illustrating public and private manners and conditions in administration, education, politics, and literature; also pictures of types of Roman society, such as legacy hunters, spendthrifts, pedants, patrons, etc., as well as incidents of travel and entertainment.

Latin 7-8-Great Greek and Latin Authors in Translation. points each Session. Professor Lodge

Hours to be arranged before registration

In the Winter Session, Greek authors, Homer, Hesiod, the Dramatists, the Historians, Demosthenes, Plato, Aristotle, Theocritus, and Lucian will be read; in the Spring Session, the Latin authors, Lucretius, Catullus, Cicero, the Historians, Horace, Vergil, Seneca, Quintilian, Lucian, and Martial

There will be one class meeting a week for lecture and reports on the assigned reading.

MATHEMATICS

Mathematics 31-32—Industrial Mathematics. 2 points each Ses-\$ 49 sion. Mr. Breckenridge

S., 11-12.50. Room 211 T. C.

This course is designed especially for teachers of mathematics or mechanic arts in technical or trade schools, but it is also useful for teachers in academic schools who wish to vitalize the teaching of mathematics by the use of practical problems. It includes the slide rule, short methods, checks, mensuration of plane and solid figures, logarithms, the trigonometric solution of plane triangles, the micrometer, the vernier, approximations, errors, graphic computation, elementary mechanics, and elementary work with the transit and level.

Practical problems are selected according to the needs of the student; the mathematics of wood-working; rough lumber; general construction; forestry methods in heights of trees; house building; power transmission, pulleys, belts, and speeds; pattern-making and foundry work; metal-working; cutting speed and feed; tapers; thread proportions; gearing for screw cutting; indexing; gear proportions and spirals.

Prerequisite: College entrance mathematics or an equivalent experience in mechanic arts

Practical Arts 158A—Thrift, Savings, and Investment. 2 points.

Mr. Breckenridge S., 9-10.50, Spring Session

For description, see § 40

Summer Session Courses in Mathematics, 1919

Mathematics s31—Industrial Mathematics. points. Mr. Breckenridge

Education s159—The Teaching of Applied Mathematics. 2 points. Mr. Breckenridge

Education s160—Laboratory in Applied Mathematics. 2 points. Mr. Breckenridge

MUSIC

For courses in Music, see under Technical Courses, §§ 88-93

NATURE-STUDY

Biological Nature-Study—See Biology 51-52 Physical Nature-Study—See Physics 1-2

NURSING AND HEALTH

For courses in Nursing and Health, see under TECHNICAL COURSES, \$\$ 95-100

PHYSICAL EDUCATION

For courses in Physical Education, see under Technical Courses, §§ 101-107

PHYSICS

Laboratory ticket: Students in all courses in physics are required to purchase from the Bursar a laboratory breakage ticket, good for all science departments, price \$2. Unused coupons are redeemable at the end of any Session.

Students who apply for exemption from required courses in physics on the basis of study previously completed at other colleges must submit note-books, names of text-books used,

and brief outlines of previous work.

Students who have completed an approved high-school course in physics will be required to take Physics 1b (laboratory work) to complete Physics 1.

Physics 1L—General Course in Applied Physics. Lectures, excursions, and laboratory work. 4 points. Mr. Good and assistant

Winter Session:

Laboratory: Section I: M. and W., 10-11.50 Section III: M. and W., 1.10-3

Section V: M. and W., 4.10-6

Lectures: M. and W., 3.10

Spring Session (course repeated):

Laboratory: Section II: M. and W., 1.10-3

Section IV: M. and W., 4.10-6

Lectures: M. and W., 3.10

Limited sections. Laboratory, Room 408 T. C. Lectures in Room 411 T.C.

This course includes a series of exercises in the study of practical appliances, and serves

as a basis for interpreting the mechanisms and phenomena of physical experience.

A considerable part of the work involves the construction, operation, and uses of such appliances as clocks, pulleys, balances, pumps, elevators, water-motors, water systems, steam-engines, gas-engines, water heaters, the automobile, musical instruments, the camera, the microscope, the projectoscope, electric lighting, household electrical utensils, ammeters, voltmeters, wattmeters, electric cells, storage batteries, the telegraph, the telephone, motors, generators, wireless, and the X-ray.

Physics 1a—Lectures in Physics 1. 2 points

Physics 1b—Laboratory work in Physics 1. 2 points

Physics 2—Applied Physics. Lectures, excursions, and laboratory work. 4 points. Mr. Good and assistants

Tu. and Th., 9-11.50, Spring Session. Room 408 T. C.

This course is based upon Physics I, and proceeds into a more extended treatment of typical appliances which belong in the field of physics. The work will include studies of practical apparatus for demonstrating the principles of mechanics, sound, heat, light, and electricity. Opportunity will be given for operating, and testing various types of mechanical, heating, and electrical apparatus and household appliances; for operating motors, generators, steam-engines and gas engines; for a study of the mechanisms of an automobile, and for observation of the mechanical, electrical, heating, ventilating, refrigerating, elevator, and water systems of the Teachers College buildings.

Prerequisite: Physics I.

Physics 31L—Household Physics. Lectures, excursions, and laboratory work. 2 points. Mr. Good and assistants

Winter Session:

Laboratory: Section I: Th., 10-11.50

Section III: Tu., 10-11.50

Lecture: Th., 9

\$ 50

§ 51

Spring Session (course repeated):

Section II: W., 9-11.50 Limited sections. Room 408 T. C.

The purpose of this course is to teach how to use and care for the equipment of homes and nstitutions, with particular reference to mechanical and sanitary aspects. It will show how modern appliances may be either nuisances or sources of comfort, according as one can or cannot make intelligent use of them. The course will deal with water supply, plumbing, sewers, heating, ventilation, refrigeration, gas supply, stoves, lamps, electric lighting, cooking and heating, telephones, elevators, and dumbwaiters, machinery for dishwashing, laundry and cleaning, fire extinguishers, and general repairs.

Prerequisite: Physics 1. Prerequisite: Physics 1.

Industrial Arts 57-Automobile Mechanics. Lectures and laboratory work. 4 points. Mr. Good and assistants. For description, see § 84

Music 32—Sound as Related to Music. 2 points. Mr. Good and others. See description in § 90

PSYCHOLOGY

See Education A3, under EDUCATION, § 41

RELIGIOUS EDUCATION

(For full description of the following elective courses, see the Announcement of the School of Education, and consult Professor TALLMAN, adviser.)

Education 261-262—Problems of Method in Religious Education. 2 points. Professors Tallman, Coe, and Hartshorne, and Miss Rankin M. and W., 3.10

Education 261x-262x—Field Work in Social-Religious Centers. 2 points. Professor Tallman and others F., 11

Education 263–264—The Use of the Bible in Religious Education. 2 points each Session. Professor Tallman S., 11-12.50

Education 269-270—The Problems of Foreign Missionary Education. 2 points each Session. Dr. SAILER

M. and W., 10

Biblical Literature 149—The Religion of the Old Testament. 2 points, Winter Session. Dr. BEWER M. and W., 5.10.

Biblical Literature 150—The Religion of the New Testament. 2 points. Dr. Bewer

M. and W., 5.10, Winter Session

Biblical Literature 152—The Religion of the Old Testament Teaching. 2 points

Hours to be arranged

This is a special section of Biblical Literature for Jewish students.

Biblical Literature 154—Significance and Inspiration of the Bible Hours to be arranged

A special section of Biblical Literature for Catholic students.

SOCIAL SCIENCE

Social Science 87—Principles of Modern Social Work. 2 points § 51a Section I: W., 4.10-6, Winter Session. Repeated as

Section II, Spring Session

Each section requires fifteen students

This course provides a general survey of social disabilities, outlines the effects of these on family and individual welfare and discusses the general principles and methods of

prevention and relief. It illustrates the case method of handling typical problems of social disability and discusses the standard of living in relation to relief, the work of various types of social agencies and the co-ordination of these agencies in working out a constructive social program.

Social Science 89—Introduction to Sociology. 2 points.

Tu. and Th., 3.10, Winter Session. Room 200 T. C.

The individual in society. What is a society? How does it behave? Is there a verifiable social progress? Statistical sociology. Analysis of democratic society. Social organization, social mind, collective decision and procedure. Social self-control. Leadership. Social significance of economic changes. Sociological basis for determining values, educational programs and public policies.

Social Science 90—Practical Applications of Sociology. 2 points. Mr. Shenton

Tu. and Th., 3.10, Spring Session. Room 200 T. C.

A study of social conditions and processes with a view to determining procedure and A study of social conditions and processes with a view to determining procedure and policies for adjustment and reconstruction. Problems of population growth, distribution, density and composition. Problems of migration. The community and the nation. Standards of living and public health. The evolution and democratization of the family, religious, legal, industrial, political, educational and other social institutions. Possibilities and limitations of eugenics, euthenics legislation, and education for social betterment.

Prerequisite: Elementary sociology.

Social Science 110—Public Health and Standard of Living. points. Professor Chaddock

F., 4.10-6, Spring Session. Room 502 Kent Requires a registration of fifteen students

This course treats of the various phases of human conservation, and their economic and social significance. It is recommended in the place of Social Science 90 for students interested in general social problems and not specially concerned with the problems of social legislation.

Social Science 204—Modern Social Problems. For graduate students. 2 points. Mr. SHENTON

Tu. and Th., 3.10, Spring Session

The lectures are the same as in 90 above. Additional readings and reports will be required.

Education 221—The History of the Family as a Social Institution. 2 points. Professor Goodsell. See under History, § 46

Biology 104—Biology in Education and Social Work. 2 points. Professors BIGELOW and Miss STACKPOLE. See under BIOLOGY, § 36.

Practical Arts for Social Workers—See Administration 5 and Household Arts 106 (§74); courses in Cookery (§§62–65); Nutrition (§67); Industrial Arts (§84); Physical Education (§§102–106)

SPANISH

Spanish A1-A2—Elementary Spanish. 3 points each Session. Professor Bagster-Collins and Mr. Bach

Section I: M., W., F., 10 Section II: M., W., F., 11, will be organized if twenty students apply before September 24

Spanish A12—Elementary Spanish. 5 points. Mr. BACH

Daily, 10, Spring Session

A one-term course for students who were unable to begin Spanish in September.

SPEECH

For courses in Speech, see § 94

§ 51a

TECHNICAL COURSES

(For general courses see §§ 36-51)

§ 52 The technical courses of the School of Practical Arts are in the following lines: Fine Arts (§§ 52-61); Household Arts (§§ 62-80); Industrial Arts (§§ 81–87); Music and Speech (§§ 88–94); Nursing and Health (§§ 95–100); Physical Education (§§ 101–107); Practical Science (§ 108).

FINE ARTS

Professors Dow and Cornell, advisers; Miss Bliss, associate adviser In Fine Arts there are five lines of work, any one of which may be of major interest in professional programs leading to the Bachelor's degree:

I—Drawing and Painting

II—Design in the Art Industries III—House Design and Decoration IV—Costume Design and Illustration

V—FINE ARTS EDUCATION
I, II, III, and IV lead to the degree of Bachelor of Science; V to the degree of Bachelor of Science and to a teacher's diploma.

In the Freshman and Sophomore years all students are under the direction of the advisers for the General Curriculum (see § 17).

FUNDAMENTAL COURSES

The following courses are required of all who specialize in Fine Arts: Fine Arts I—Art Structure A; 2—Art Structure B; 3—Freehand Drawing; 69-70—Art Appreciation.

Fine Arts 1, 2, 51–52, and 81–82 (Art Structure A, B, C, and D) constitute a three years' series and must be taken in this order.

Majors in Fine Arts

I-Drawing and Painting-Professors Dow and Cornell, advisers Required program of studies for the Bachelor's degree:

GENERAL COURSES (see § 14): English A and B, 6 or more points in modern language, History A or B, Hygiene A, 8 points in Science (§ 14), Physical Training A and B, and other general courses (see § 14) to make a total of 45 points. At least 36 points of general courses should be completed in the Freshman and Sophomore years.

TECHNICAL COURSES: Fine Arts 1, 2, 3, 4, 25-26, 51-52, 53-54, 69-70,

§ 53

75, 76, 81–82, 83–84, 93–94 ELECTIVES to make a total of 124 points

Four-year students who intend to register for Drawing and Painting as a professional major in the Junior and Senior years are recommended to plan a program of studies as follows: Freshman and Sophomore years: see General Curriculum, § 14. Junior year: Psychology, Fine Arts 51-52, 75, 76, 93-94, Drawing 3-4, and electives. Senior year: History B, Fine Arts 81-82, 83-84.

II—Design in the Art Industries—Professors Dow and Martin, advisers

Required program of studies for the Bachelor's degree:

GENERAL COURSES: See Major I above

TECHNICAL COURSES: Fine Arts 1, 2, 3, 4, 25-26, 31-32, 51-52, 69-70, 75; Drawing 3-4, and craft work

ELECTIVES to make a total of 124 points

Four-year students who intend to register for Design in Art Industries as a professional major in the Junior and Senior years are recommended to plan a program of studies as follows: Freshman and Sophomore years: see General Curriculum, § 14. Junior year: History B, Fine Arts 51-52, 69-70, and electives. Senior year: Under the direction of the advisers.

III—House Design and Decoration—Professor Dow, adviser Required program of studies for the Bachelor's degree:

GENERAL COURSES: See Major I above

TECHNICAL COURSES: Fine Arts 1, 2, 3, 4, 14, 31–32, 51–52, 80, 89–90; Drawing 3–4, 31–32, 33–34; Administration 31; Textiles 31

ELECTIVES to make a total of 124 points

A limited amount of practical work with professional designers and supervised by the advisers may be taken in the Senior year. Plans for such work must be approved by the Committee on Instruction and be registered in advance.

Four-year students who intend to register for House Design and Decoration as a professional major in the Junior and Senior years are recommended to plan a program of studies as follows: Freshman and Sophomore years: see General Curriculum, § 14. Junior year: History B, Fine Arts 69–70, Drawing 33–34, Chemistry 3, and electives. Senior year: Textiles 31, Fine Arts 89-90, and electives.

IV—Costume Design and Illustration—Professor Dow, adviser; Miss Wilmot (Design) and Miss Northrup (Illustration), associate advisers.

Required program of studies for the Bachelor's degree:

GENERAL COURSES: See Major I above

TECHNICAL COURSES: For students specializing in Design: Fine Arts I, 2, 3, 4, 21, 22, 23–24, 51–52 or 53–54, 69–70, 71–72, 97–98; Clothing 15, 33, 45 and 85. For students specializing in Illustration: Fine Arts 1, 2, 3, 4, 21, 22, 23–24, 53–54, 69–70, 71–72, 91–92, 97–98; Drawing 31–32; Clothing 15, 27, 33

ELECTIVES to make a total of 124 points

Four-year students who intend to register for Costume Design or Illustration as a professolutions students who intend to register for Costume Design of Mustration as a professional major in the Junior and Senior years are recommended to plan a program of studies as follows: Freshman and Sophomore years: see General Curriculum, § 14. Junior year in Design: French B, Fine Arts 23–24, 53–54, 69–70, 71–72; Clothing 45, and electives. Senior year in Design: Fine Arts 73–74, 91–92 and 182; Clothing 85, and electives. Junior year in Illustration: History B, Fine Arts 23–24, 53–54, 69–70, 71–72; Drawing 31–32. Senior year in Illustration: Fine Arts 73–74, 75, 91–92, and electives.

V—Fine Arts Education—See § 60

Courses in Fine Arts

ART APPRECIATION AND HISTORY

Fine Arts 69-70—Art Appreciation. History of Art. Lectures, reports, and required reading. 2 points each Session. Professor Dow

Tu., 4.10-5.30. Horace Mann Auditorium

Appreciative study of painting, sculpture, architecture, and design, in historical development. Lantern illustrations.

First part of course: nature of space arts, art structure, composition of line and mass,

First part or course: nature of space arts, art structure, composition of the and mass, color-theory, art criticism.

In the historical study, general chronological order is followed, but facts as to dates and periods are to be derived from the text-book, Reinach's A pollo. Reading is tested by written exercises. In connection with museum and library studies, reports will be required upon some of the following subjects: The art of the American Indians, especially of those of the Southwest, Peruvian textiles and handicrafts, art of the Aztecs, Maya architecture and decoration, Egyptian painting and handicrafts, Coptic textiles, early Greek, Cypriote and Minoan design, Mohammedan design and craft-work, Gothic buildings, ancient and modern. Cathic equipture, early Italian painting. American and present-day arts. These reports

Gothic sculpture, early Italian painting, American and present-day arts. These reports may be illustrated with small photographs, tracings, or sketches.

Fine Arts 169–170—Art appreciation for graduate students. 2 points

each Session. Professor Dow

Tu., 4.10-5.30, and conference hour. In addition to the work as outlined above for 69-70, graduate students will be required to prepare short essays on assigned topics

ART STRUCTURE

Fine Arts 1—Art Structure A. For teachers, designers, illustrators, craftsmen, and painters. Lectures and studio work. 3 points. Professors Dow and Cornell, Miss Tannahill, and Miss Northrup Section I: M. and W., 9–11.50, Winter Session Section II: M. and W., 2.10–5, Spring Session

Section III: Tu. and Th., 9-11.50, Winter Session. Room 430 Macy Section IV: M. and W., 9-11.50, Winter Session. Room 507 H. A.

\$ 55

The courses in art structure stand for (a) freedom—to use line, mass, color; (b) powerto appreciate fine qualities of proportion, arrangement and color, and to obtain these

qualities in creative art work.

Outline: I. Principles of art—how lines, masses, colors may be put together to produce fine quality—spacing, rhythm, groupings. 2. Original design—choosing and combining lines, masses, colors. Exercises with brush and ink, charcoal, colored crayons, water color. Position of body, breathing, control of hand, freedom of movement, power in execution. Study of masterpieces. 3. Use—Applications in painting, illustrating, designing, modeling, and handicraft.

Reading, Dow's Composition and Theory and Practice of Teaching Art.

Fine Arts 2—Art Structure B. Continuation of Fine Arts I. Lectures and studio work. 3 points. Professor Cornell, Miss Tannahill, and Miss Northrup

Section I: M. and W., 9–11.50, Spring Session Section II: Tu. and Th., 9–11.50, Spring Session. Room 430 Macy Section III: M. and W., 9–11.50, Spring Session. Room 507 H. A.

Principles of composition; line and dark-and-light harmonies in pattern, lettering, and landscape; how to study color; harmony of colors in design, pictures, costumes, printing, the home. Study of historic examples, primitive art, Japanese art. Special study, under guidance, of museum art collections.

Applications in decoration, textile design, illustration, painting.
Reading as in Fine Arts 1, also Day's Pattern Design, Johnston's Writing, Illuminating, and Lettering.

Prerequisite: Fine Arts 1. Design or drawing in other schools cannot be accepted as equivalent of Fine Arts I or 2.

Fine Arts 51-52—Art Structure C. Continuation of Fine Arts 2. Lectures and studio work. 3 points each Session. Professors Dow and CORNELL

Tu. and Th., 9–11.50. Room 435 Macy

Advanced work in principles of composition, with applications in wood-block color-printing; painting, charcoal landscape; practical design. Four hours' outside work weekly. Copying in museums.

Reading, Raymond's Genesis of Art Form.

Prerequisites: Fine Arts 1, 2.

Fine Arts 151–152—Art Structure C. For graduate students. points each Session. Professors Dow and CORNELL

Fine Arts 49-50—Art Structure Ca. Lectures and st 1½ points each Session. Professor Dow and Miss TANNAHILL Lectures and studio work.

S., 9-11.50. Room 430 Macy

An abridged course in theory and principles of art (see Fine Arts 1, 2, 51-52). For

teachers, designers, illustrators, craftsmen, and painters.

Exercises in composition. Brush drawing and painting; charcoal studies; color in theory and practice. Assigned reading and museum work.

Fine Arts 75-76—Lettering and Color Printing. 3 points each Session. Miss Tannahill

Tu. and Th., 2.10-5. Room 430 Macy

Lettering: Composition of lettered spaces. Styles of letters, type faces, beauty of form in letters, legibility. Writing with reed-pen, steel pen, brush, and stick. Designing of posters, cards, title-pages, page decorations, florets. Printing: A limited number of accepted designs may be cut on linoleum and proofs printed on a hand-press.

Reading: Inhestons.

Reading: Johnston's Writing, Illuminating, and Lettering; Goudy's The Alphabet; Dow's Composition.

Open only to those who have completed Fine Arts I and 2.

Fine Arts 75x-76x—Poster Design. Lectures and studio work. points each Session. Professor Dow, instructors, and special lecturers

F., 2.10-5, and hours to be arranged

The poster—its purpose and use. Appeal and response. Designing of posters. Color schemes. Papers, inks, the printing press. Engraving on linoleum. Printing of simple designs. Printing with wood block alphabets and florets. Study of Japanese prints and poster collections.

Special Note-Making of posters for college use will be part of the required work of

this class.

Reading, Price's Poster Art, Goudy's The Alphabet, Hollingsworth's Psychology of Advertising, Dow's Composition.

Open only to those who have completed Fine Arts 1, 2, 3, 4, and 75. Design or drawing in other schools cannot be accepted as equivalent of Fine Arts 1 and 2.

Fine Arts 81–82—Art Structure D. Continuation of Fine Arts 51–52. Lectures, reading, and studio work. 3 points each Session. Professors Dow and CORNELL

M. and W., 2.10-5. Room 426 Macy

Advanced work in line, dark-and-light and color. Applications of principles of composition, in book illustration, illumination, covers, landscape, textile design, wood-block and stencil color-printing. Copying in museums.

Prerequisites: Fine Arts 1, 2, 51-52, and 53-54.

Fine Arts 81a-82a—Art Structure Da. Lectures and studio work: 1½ points each Session. Professor Dow and Miss TANNAHILL

(Not given in 1919–1920)

A course in theory and principles of art, abridged from Fine Arts 81–82 (see Fine Arts 1, 2, 51–52, 81–82). For designers, illustrators, craftsmen, painters, and teachers. Exercises in composition. Brush drawing and painting; charcoal studies; door in theory and practice. Composition in book illustration, textile design, landscape, wood-block and stencil Prerequisites: Fine Arts 49-50, or 51-52, and 53a-54a.
NOTE—Fine Arts 81a-82a alternates with 49-50.

Fine Arts 281-282—Art Structure D. For graduate students. 3 points each Session. Professors Dow and CORNELL

DRAWING, PAINTING, AND MODELING

Fine Arts 3—Freehand Drawing. 2 points. Professor MARTIN and Mr. Heckman

Section I: Tu. and Th., 2.10-4, Winter Session Sections III-IV: W., 4.10-6, Winter and Spring Sessions. Room 426

Outline, relief, light and shade. Perspective. Drawing from still life, flowers, and casts; landscape sketching. Charcoal, brush, pencil. Copying of masters' drawings.

Reading, Norton's Freehand Perspective, Lutz Practical Drawing, Wm. M. Hunt's Talks on Art.

Fine Arts 3x—Blackboard Drawing. I point, supplementary to any course in Fine Arts, Drawing, or Science Teaching. Professor MARTIN F., 4.10–6, October and November

Practice in rapid drawing and sketching upon the blackboard. Figures in action, animals, fruits, and flowers, still life, and landscape.

For students in the Junior year, and those who obtain the consent of Professor Dow.

Fine Arts 4—Freehand Drawing, Advanced. 2 points. Professor MARTIN and Mr. HECKMAN

Fine Arts 3, continued

Tu. and Th., 2.10-4, Spring Session

Fine Arts 25–26—Clay Modeling and Pottery. 2 points each Session. Mr. Upjohn

Section I: W. and F., 3.10-5 Section II: Tu. and Th., 2.10-4

Section III: Tu. and Th., 10-11.50. Room 31 Macy

Clay modeling; modeled and incised tiles and panels. Mouldings, medallions in low and high relief. Sketching of small figures in clay. Modeled heads from casts. Colored relief. Mould-making, one-piece, chip-and-piece, and gelatine. Casting in plaster. Pottery. Making of shapes. Coiling building, pressing, casting, mould-making. Decoration with underglaze colors. Sprigging. Biscuit firing. Glazing and gloss firing. Reading, Cox's Pottery, Binns' Potter's Craft, Jewitt's History of Pottery.

Prerequisites: Fine Arts 1, 2.

Fine Arts 125–126—Clay Modeling and Pottery. For graduate students. 2 points each Session. Mr. UPJOHN

Fine Arts 53-54—Drawing and Painting. 2 points each Session. Professor Martin

Section I: Tu. and Th., 9–10.50. Room 426 Macy Section II: W. and F., 2.10–4

Expression by line, modeling in line, shading, gradation, values, perspective, modeling in tone, technique of charcoal. Painting in oil and water color, figures, animals, land-scapes. Copying in museums.

Reading, Knowlton's Hints on Sketching from Nature, Ross' Drawing and Painting. Prerequisite: Fine Arts 3 or equivalent.

Fine Arts 53a-54a—Drawing and Painting. I point each Session. Professor Martin

S., 9-10.50. Room 426 Macy

Freehand drawing in charcoal and pencil from objects, cast, still life, and costumed figure.

Shading, gradation, values, texture, and tone-modeling. Painting in oil and water color. Note—Fine Arts 54a, advanced, alternates with 53a.

Fine Arts 83-84—Painting. 4 points each Session. Professor BEMENT M., W., F., 9-11.50. Room 426 Macy Drawing and painting from life, costumed model. Compositions of figures and land-scapes for mural painting and illustration. Portrait and landscape painting. Copying in museums. Studio and outside work. Reading, Vanderpoel's The Human Figure, Dr. Rimmer's Anatomy, Alfred East's Landscape Painting, Letters of Van Gogh.

Prerequisites: Fine Arts 51-52, 53-54, or equivalents.

Fine Arts 283-284—Painting. For graduate students. 4 points each Session. Professor Bement

Fine Arts 83a-84a—Painting. 1½ points each Session. MARTIN

S., 9-11.50. Room 426 Macy

Still-life painting, landscape painting, work from costumed model. Advanced course following Fine Arts 49-50, 53a-54a.

Fine Arts 93-94—Life Class for Women. 3 points each Session. Professor Bement

M., W., F., 9-11.50. Room 426 Macy

Open only to those who have satisfactorily completed Fine Arts 53-54, and who have the consent of Professor Dow.

Drawing and painting from living model. Two criticisms per week.

Fine Arts 93x-94x—Supplementary to 93-94. 2 points each Session. Hours to be arranged, probably Tu. and Th., 9-11.50

Fine Arts 97-98—Figure Construction. 2 points each Session. Professor Bement

W., 2.10-5

\$ 57

A course in drawing and sketching from life, adapted to the requirements of students in costume design and for students requiring a short course in life drawing

Reference Books: Rimmer's Anatomy, E. J. Poynter's Drawings, and Vanderpoel's The

Human Figure.

Life Class for Men—Consult the Announcement of the School of Architecture

Mechanical Drawing—See under Industrial Drawing, § 81

HOUSE DESIGN

Fine Arts 11-Art Structure I for House Design (Not given in 1919-1920. Substitute Fine Arts 1, see § 54.)

Fine Arts 14—Home Furnishing. Lectures and studio work. points.

Section I: M. and F., 9-11.50, Winter Session Section II: Tu. and Th., 9-11.50, Spring Session

Studies in art structure and design in relation to the furnishing of the home. Good spacing, and arrangement, leading lines, rhythmic lines, light and dark spaces, color combinations and schemes. Simple exercises with charcoal, brush, and crayon. Excursions to museums, studios, and shops.

Assigned reading.

Fine Arts 41—Art Structure II for House Design

(Not given in 1919–1920. Fine Arts 2 may be substituted.)

Fine Arts 57-58—Furniture Design

(Not given in 1919–1920)

Drawing 35—House Planning. 3 points each Session.

(Not given in 1919-1920. Administration 31 may be substituted)

Fine Arts 80—Home Furnishing, Advanced. Lectures, readings, and reports. 3 points. M. and F., 9-11.50, Spring Session. Room 505 H. A.

Development of the house, artistic and practical. Each phase will be presented by an expert. The materials to be used will be studied in three ways: (a) contact, (b) observation (c) illustrated lectures.

Prerequisites: Fine Arts 1, 2 (or 11, 41), 3, and Drawing 3-4.

Fine Arts 180—Home Furnishing for Graduate Students. points.

Fine Arts 89-90—House Decoration, Advanced. 3 points each Session. Special fee \$12 per point. Mr. Moran

Tu., 9-11.50 at Metropolitan Museum of Art

Requires fifteen students

Application of the periods in schemes for house interiors, studies to be made in the Metropolitan Museum and other collections. Elevations, specifications, studies for the development of schemes. Office practice outlined for the conduct of work. Illustration in the formation of a working library.

Prerequisites: Fine Arts 1, 2 (or 11, 41), 3, 69-70, Drawing 31-32, 33-34.

Fine Arts 189-190—House Decoration, Advanced. 3 points each Session. Special fee \$12 per point. Mr. Moran

Advanced work as outlined for 80-00.

COSTUME DESIGN AND ILLUSTRATION

Fine Arts 21L—Costume Design. 3 points. I and II), Miss Northrup (Sections V-VI) Miss Wilmot (Sections

Section I: M. and F., 9-11.50, Winter Session. Repeated as

Section II, Spring Session

Section V-VI: S., 9-11.50, Winter and Spring Sessions. Begins September 27

Limited sections. Room 305 H. A. Sections I and II, 507 H. A. Section

Designing of costumes for various occasions. Study of line, dark and light, color in fabrics and textile combinations. Pencil and water-color drawing. For teachers of household arts education, textiles and clothing, costume design, and for professional designers. Prerequisites: Fine Arts 1, 2, and 97-98.

Fine Arts 22—Costume Design for Dressmaking. 3 points. Miss

Section I: Tu. and Th., 2.10-5, Winter Session. Repeated as Section II, Spring Session. Room 305 H. A.

Application of the fundamental principles of design to meet commercial and practical demands for costumes. Designing and making of accessories, and decorating of fabrics. Prerequisites: Fine Arts 1, 2, 21, and Clothing 33.

Fine Arts 23-24—Costume Design, Advanced. 3 points each Session. Miss NORTHRUP

Tu. and Th., 9-11.50. Room 507 H. A.

Continuation of Fine Arts 21 with further application of principles of line and color to costumes for individual types and characters in drama. Study of costumed groups. His-

\$ 58

toric fashion books, libraries, museums, and nature are used for reference and inspiration for costume designing. Special color work and emphasis on technique.

Prerequisites: Fine Arts 1, 2, 21.

Fine Arts 71-72—Costume Illustration. 3 points each Session. Miss Northrup

M. and F., 1.10-4. Room 507 H. A.

A course leading to professional costume illustration and design, also to teaching of costume design. The work includes figure drawing from cast and costumed model, representation of various fabrics; sketching and describing fashion exhibits.

Study of technique in pen and ink, gouache, water color and tempera. The course aims to give power in drawing the clothed figure and skill in representing fabric textures. Reference books: Vanderpoel's The Human Figure, Hatton's Figure Drawing.

Prerequisite: Fine Arts 21.

Open without prerequisites to advanced students in Fine Arts.

Fine Arts 91-92—Costume Illustration, Advanced. 3 points each Session. Miss Northrup

M. and F., 1.10–4. Room 507 H. A.

Final course in Costume Illustration. Practical designs for fashions, for stage costumes for costume posters, magazine covers, and advertising. Drawing for reproduction a magazine, book, and newspaper illustrations.

Prerequisite: Fine Arts 71-72.

Fine Arts 291-292—Costume Illustration, Advanced. For graduate students. 3 points each Session. Miss Northrup

Registration for this course must be approved by the Director of the School of Practical

Fine Arts 97–98—Figure Construction. See § 56

Drawing 31-32—Freehand Perspective Drawing. See § 82

Fine Arts 182—Art for School and Community Festivals. 2 points. Miss Northrup

Tu., 7.10-9 p. m., and three hours to be arranged, Winter Session. Room 430 Macy

Supplementary to Education 181, see § 41

A simplified art course for those who expect to direct or take part in festivals or plays. Color harmonies and designs for stage settings and costumes. Study of psychological effects of line and color. Decorating materials and small properties, including wood-block printing, tie-dyeing. Work in relation to the annual Teachers College Festival.

ART INDUSTRIES

Fine Arts 31-32—Design in the Art Industries. Lectures and studio work. 3 points each Session. Professors Dow and MARTIN

M. and W., 9-11.50

\$ 59

Instruction in principles and practice of design. Training for professional designers and craftsmen. Drawing with brush and ink. Painting in fresco and water color. Line design and space filling. Tone and masses. Color theory, color scheming. Original design for metal, wall paper, wood, pottery, textiles, and stained glass.

Reading, Dow's Composition, Day's Ornament and Its Application, and Pattern Design, Hicks' The Craft of Hand-made Rugs, Hooper's Hand-loom Weaving.

Prerequisites: Fine Arts 1, 2.

Metalworking 1-2—Hammered Metal, Silversmithing, and Jewelry. Shopwork. 2 points each Session I—Hammered Metal

Tu. and Th., 9-10,50, Winter Session. Rooms 236 and 243 Macy

Instruction in hammered and raised work. Processes include forming of bowls, trays, boxes, candlesticks, furniture fittings, and other shapes, and their enrichment by repoussé; coloring of metals by patinas. Design is required in planning the projects.

Students should elect Fine Arts r parallel, and if possible Fine Arts 31-32.

2—Silversmithing

Tu. and Th., 9-10.50, Spring Session

The course continues Metalworking 1, taking up problems in hammered silver, hard and soft soldering, etching, repoussé, finishing and coloring, and enameling.

Students should elect Fine Arts 2 parallel, and if possible Fine Arts 31-32.

Metalworking 4—Metalworking for Industrial Arts. 2 points. S., 9-11.50. Requires fifteen students

Metalworking 5-6—Jewelry. Shopwork. 2 points each Session.

Section I: M. and W., 2.10-4 Section II: M. and W., 4.10-6

Rooms 26 and 243 Macy

Instruction in the making of buckles, fobs, chains, necklaces, pendants, rings, setting of stones, casting of silver; polishing and finishing of metals, coloring by chemical and electrolytic methods. Design is required in planning the projects.

Prerequisites or parallel: Fine Arts 1, 2 or 31-32.

PHOTOGRAPHY

Fine Arts 7-8—Art Photography I. 2 points each Session. Lectures

and laboratory work. Mr. WHITE
W., 4.10-6; S., 9-10.50. Room 325 Macy. Extra hours desirable but optional. Begins October I. Requires ten students

Application of art to photography, and instruction in the use of the camera. Field and

laboratory work, developing, printing, and mounting.

Practice in the use of the camera in the field and in the studio on Saturday mornings.

Recommended preparatory: Fine Arts 1, 2.

Fine Arts 37-38—Art Photography II. 2 points each Session. Lectures and laboratory work. Mr. WHITE

Th., 4.10-6; S., 9-10.50. Room 325 Macy. Extra hours desirable but

optional. Begins October 2. Requires ten students

Making negatives, positives, and enlarged negatives, the manipulation of negatives and printing papers. Coating of papers. Photography in landscape, architecture, illustration, and portraiture. Mounting and framing. Instruction in the making of lantern slides, for graduates, students, and lecturers.

Practice will be offered in the use of the camera in the field and in the studio on Saturday mornings and at other times in the studio by appointment.

Prerequisite: Art Photography 1 or equivalent.

V—FINE ARTS EDUCATION

Professor Dow, adviser

In Fine Arts Education there are two majors:

A—TEACHING OF FINE ARTS

B-Supervision of Fine Arts

A leads to the degree of Bachelor of Science and a teacher's diploma; B leads to the same degree and a supervisor's diploma. Graduate students may arrange programs for the Master's degree and a diploma in either A or B

Each of these offers a two-year program for Junior and Senior years. Students who complete the first two years (64 points) of the General Curriculum (see § 14) with electives in Fine Arts may apply at the beginning of the Junior year for admission to a major in Fine Arts Education

Students who are unable to complete the requirements for a degree or diploma, but who can meet the conditions stated in § 13, may apply for a

certificate

A—Teaching of Fine Arts

Prerequisites: Fine Arts 1—Art Structure A (3 points); Fine Arts 2—Art Structure B (3 points); Fine Arts 3—Freehand Drawing (2 points) or equivalent.

Junior year: Education A and 2 (each 4 points); Fine Arts 50–70—Art Appreciation (4 points); Fine Arts 51–52—Art Structure C (6 points); Fine Arts 53–54—Drawing and Painting (4 points); Fine Arts 25–26—Clay Modeling (4 points); Drawing 3–4—Mechanical Drawing (4 points); Education IIIx (2 points).

Senior year: Education B (4 points); Fine Arts 83–84—Painting (8 points); Education III—II2—Theory and Practice of Teaching Art (4 points); Education IIIx—II2x—Practical work (2 points).

§ 59

B—Supervision of Fine Arts

Education A, B, and 2 (each 4 points); Education 213, Education 411—Criticism and Supervision of Instruction; Education 113-114—Supervision of Fine Arts (4 points); and electives recommended by the adviser.

Special admission requirement: Successful experience in teaching and the introductory

courses of A above.

Education 111-112-Theory and Practice of Teaching Art. Lectures and demonstrations. 2 points each Session. Requires the prerequisites and a full year of residence. Professor Dow and Miss DEMENT

Theory: Fine art an expression of creative power. All have this power and will use it if opportunity is given. This is the basis for all forms of art teaching.

Practice: Planning of progressive series of lessons in line, mass, and color, calling for initiative, good choices, appreciation of fine quality, force, and character in execution. Teaching of design, drawing, painting, modeling, and art-crafts. Methods for different types of schools. Fine Arts in relation to other departments, the home, the community. Written reports, lesson plans, courses of study. Demonstrations of teaching, discussions, with the procedure to oblive case. Education May 2009. criticisms. Practice teaching, see Education 111x-112x.

Prerequisites: Courses in art structure, Fine Arts 1, 2, 51-52; also Fine Arts 3, 53-54, 25-26, 69-70; 83-84 taken parallel; Education 241-242 recommended. Design, drawing, and painting in other schools, or teaching experience not accepted as equivalent for the Art

Structure courses.

Education 111x-Preliminary Practical Work in Art Teaching. 2 points. Miss Dement

Hours to be arranged with instructor before registration

For Juniors only. A course preparatory to Education 112x, with special reference to the elementary school. Adaptation of the work in art structure, art appreciation, and freehand drawing, to the teaching of art in the grades. One hour per week will be spent in assisting or observing in the elementary school.

Prerequisites: Fine Arts 1, 2, 3, 53-54. Fine Arts 51-52 may be taken parallel. Art courses in other schools will not be accepted as equivalents for Fine Arts 1, 2, 51-52.

Education 112x—Practical work for Seniors in connection with 111-112. 2 points. Hours to be arranged with Miss Dement. Graduate students should register for Education 283 or 284, see §41.

Education 113-114—Supervision of Fine Arts. 2 points each Session. Professor Dow

Hours to be arranged

Planning of art courses for city systems, for normal schools, and for art schools; methods of supervision in cities and towns; art lectures for groups of grade teachers; art teaching in secondary schools; equipment and organization of art departments.

Prerequisite or parallel: Education III-II2 with its prerequisites; Education B or

243-244 or Education 213 and 411.

Education 311-312—Practicum. 4 points each Session. Professor

Hours to be arranged, Winter Session

Advanced studies in art education in the history and appreciation of art, and in art criticism. Lectures upon Japanese and Chinese art, Primitive American Art, Gothic Art, and craftsmanship, in relation to the work of the American teacher, museum director, painter, designer, or craftsman.

The course offers preparatory work for directors of museums, directors of art schools, and lecturers upon the history of art. Written criticisms, short essays, lecture plans, and one piece of technical work will be required.

Readings to be assigned.

Prerequisites: Fine Arts 1, 2, 151-152, 169-170, and Education 111-112 or 113-114.

Education 181—School and Community Festivals. See § 41

Special and Extension Courses in Fine Arts

Announcement of special and extension courses in Fine Arts will be made in the Announcement of Extension Teaching, which may be obtained from the Secretary of Columbia University

Summer Session Courses in Fine Arts, 1919

Professor Dow and Mrs. Atwell will advise students and arrange their programs of study. Note—Fine Arts 51-52 is not given in the summer sessions. Students whose requirement is one year and several summer sessions should take the year of residence last, having satisfied in summer session the prerequisites, Fine Arts 1, 2, Education A and 2.

Fine Arts s1—Art Structure. 2 points. Mrs. Atwell and Miss Boas

Fine Arts slx-I point

Fine Arts s2—Art Structure, Advanced. 2 points. Mrs. Atwell and Miss Boas

Fine Arts s2x-I point

Fine Arts s53—Drawing and Painting. 2 points. Mr. HUMANN

Fine Arts s54—Drawing and Painting. 2 points. Mr. HUMANN

Fine Arts s83-Advanced Painting. 3 points. Professor MARTIN

Fine Arts s251—Art Structure for Graduate Students. 3 points. Mrs. Atwell and Miss Boas

Fine Arts s283-Advanced Painting for Graduate Students. points. Professor MARTIN

Fine Arts s25—Clay Modeling. 2 points. Mr. UPJOHN

Fine Arts s55—Pottery. 2 points. Mr. UPJOHN

Education s111a—Teaching of Fine Arts. I point. Miss Boas

Metalworking s1—Jewelry. 3 points. Professor MARTIN

Fine Arts s11—Household Design. 3 points. Mr. MEEKER

Fine Arts s14—Principles of Home Decoration. 3 points. MEEKER and special lecturers

Fine Arts s21—Costume Design, Elementary. 3 points. ALEXANDER

Fine Arts s182—Design for School and Community Festivals. points. Miss Murphy

Fine Arts s23—Costume Design, Advanced. 3 points. Miss MURPHY

Fine Arts s291—Costume Design, Advanced. 3 points. Miss MURPHY

HOUSEHOLD ARTS

In Household Arts there are seven lines of work, any one of which may be of major interest in professional programs leading to the Bachelor's degree:

I—FOODS AND COOKERY (see § 62)

II—NUTRITION AND FOOD ECONOMICS (see § 67)

III—TEXTILES AND CLOTHING (see § 68)

IV—Administration—Household or Institutional (see § 72)

V—General Household Arts (see § 76)

VI—Household Arts—Fine Arts (see §§ 57-58)

VII—HOUSEHOLD ARTS EDUCATION (see § 77)

I-V lead to the degree of Bachelor of Science, VI to the degree of Bachelor of Science and a teacher's diploma (§ 12). Graduate work in Household Arts is also offered (see § 77 and courses numbered above 100 in §§ 65-80)

I. FOODS AND COOKERY

Professor Van Arsdale, adviser

NOTE—In the Freshman and Sophomore years all students are under the direction of the advisers for the General Curriculum (see § 17).

Required program of studies for the Bachelor's degree:

GENERAL COURSES (see § 14): English A and B, 6 or more points in modern language, History A or B, Hygiene A, 8 points in Science (§ 14), § 61

§ 62

Physical Training A and B, and other general courses (see § 14) to make a total of 45 points. At least 36 points of general courses should be completed in the Freshman and Sophomore years

TECHNICAL COURSES: Cookery 1, 3, 4, 41, 61, 75, 81, 85, 90, 131 (H. A. 131); Chemistry 25, 31, or 41; Physics 31; Nutrition 71; Administration 1 ELECTIVES to make a total of 124 points

Four-year students who intend to register for Foods and Cookery as a professional major in the Junior and Seniors years are recommended to plan their program of studies as follows: Freshman and Sophomore years: see General Curriculum, § 14. Junior year: Chemistry 51, Economic Science 1, Cookery 81, 85, 90, Physics 31, and electives. Senior year: Nutrition 71, H. A. 131, and electives.

Students who are unable to complete the requirements for a degree but who can meet the conditions stated in § 13 may apply for a certificate

Students who are preparing to teach foods and cookery should apply for admission to the major in Household Arts Education, Group B (§ 77) at the beginning of the Junior year; Cookery 1, 3, 41, and H. A. 131 are required for the diploma in teaching household arts

Courses in Cookery

Limited sections: For all courses announced as "limited sections," students

must reserve places at the time of registration. See 4 in § 24.

Sequence of cookery courses: For four-year program in Foods and Cookery: -Freshmen, 1, 3, 4; Sophomores, 41, 61, 75; Juniors, 81, 85, 90; Seniors, 131. For students in Household Arts Education who enter as Juniors or

Seniors, 1, 3, 41, 131.

Laboratory ticket: Students in all laboratory courses in cookery are required to purchase from the Bursar a laboratory breakage ticket, good for all science departments, price \$2. Unused coupons are redeemable at

the end of any Session.

Costume for foods and cookery laboratories: Students are requested to wear white cotton clothing; plain skirt, tailored waist, plain white collar; no color in ties or bows of neckwear; long plain white apron with bib (for laboratory only); little if any jewelry.

The classes in cookery meet in Rooms 200-214 Household Arts Building.

Cookery 1—Technology of Cookery and Food Economics. Lectures, demonstrations, and conferences. 2 points. Professor VAN ARSDALE, Miss Colman, and Miss Conway

Section I: M. and F., 1.10, Winter Session. Repeated as

Section II, Spring Session

The purpose of this course is to develop skill in the technique of cookery by means of a scientific introduction to the principles and processes and food materials involved. The course will consider the quantitative and qualitative aspects of cookery, with special stress on weights and measures and the use of the thermometer.

The course will also lay stress on the factors involved in the relations between producer

and consumer.

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This course is a prerequisite or parallel to all courses in cookery except Cookery 2. Prerequisite or parallel: Chemistry 1-2, or 3. Students are also advised to take Physics 1.

Cookery 2L—Elements of Cookery. Lectures and laboratory work. 3 points. Mrs. Gunn and Miss Conway

Section I: Tu. and Th., 2.10-5, Winter Session Section II: M. and W., 2.10-5, Spring Session

Limited sections

This course is for students not majoring in foods and cookery or Household Arts Education. It includes a general survey of the elemertary principles of cookery, with an intro-duction to planning and serving meals in the home. Elementary chemistry, physics, and biology are desirable preliminary or parallel courses. This course does not satisfy the prerequisites for other courses of cookery, unless so stated in the Announcement, nor may it be credited in addition to Cookery 3 or 41.

Cookery 3L—Principles of Cookery. Lectures and laboratory work. 3 points. Miss STONE and Miss PEACOCK

Section I: M. and W., 2.10-5, Winter Session. Repeated as

Section II, Spring Session Section V: M. and F., 9-11.50, Winter Session Section VII: Tu. and Th., 9-11.50, Winter Session

Section IX-X: S., 9-11.50, Winter and Spring Sessions. registration of ten

Section XI: M. and W., 7-9.50 p. m., Winter Session. Begins September

29. Requires registration of ten

Limited sections

The purpose of this course is to give a working knowledge of the general principles of cookery.

Prerequisite or parallel: Chemistry I-2 or 3, and Cookery I.

Cookery 4L-Applied Principles of Cookery. Lectures and laboratory work. 3 points. Miss Peacock and Miss Stone Section I: M. and F., 9-11.50, Winter Session. Repeated as

Section II, Spring Session Section IV: Tu. and Th., 9-11.50, Spring Session

Limited sections

The purpose of this course is the application of the principles of cookery to a wide range of food materials as a preparation for the more specialized type of work in the advanced courses to follow

Prerequisite: Cookery 3.
Prerequisite or parallel: Cookery 1, Chemistry 1-2 or 3, and Physics 1.

Cookery 41L—Home Cookery and Table Service. Lectures and laboratory work. 4 points. Mrs. Gunn and Miss Conway

Section I: M. and F., 9-11.50, Winter Session. Repeated as

Section II, Spring Session

Section III: M. and W., 2.10-5, Winter Session. Repeated as Section IV, Spring Session
Section V-VI: S., 9-11.50, Winter and Spring Sessions. Begins September 27. Requires registration of ten

Section VIII: M. and W., 7-9.50 p. m., Spring Session. Begins February

9. Requires registration of ten

Limited sections

The purpose of this course is to give opportunity for practice in home cookery. It will include the study, planning, and cooking of breakfasts, luncheons, dinners, and suppers, and various methods of preparation and garnishing. It is intended for students who are planning to teach or to take charge of families where such work is required. It deals also with table service.

Prerequisites: Cookery 3, Chemistry 1–2 or 3, and Physics 1.

Prerequisite or parallel: Cookery 1, Chemistry 25, and Biology 4. Nutrition 1 is strongly ecommended as a parallel. Administration 21 is also recommended.

Cookery 43L—Table Service. Lectures and laboratory work. 2 points. Mrs. Gunn

Section I: W., 9–11.50, Winter Session. Repeated as

Section II, Spring Session

Section III: F., 2.10-5, Winter Session. Repeated as Section IV, Spring Session

The purpose of this course is to give instruction in table service to those who have had the equivalent of the home cookery in Cookery 41.

Cookery 61—Lecture-Demonstrations in Cookery. Miss Shapleigh

Section I: Tu. and Th., 9-11.50, Winter Session. Repeated as

Section II, Spring Session

This course is intended to acquaint the student with the more complicated processes of cookery, more elaborate utensils, and a greater variety of flavorings, seasonings, and food materials. Stress will be laid on comparison of the new cookery with the old standards.

Prerequisites: Cookery 3 and 41.

Cookery 71L—Elementary Cookery for Invalids. Lectures, demonstrations, and laboratory work. 2 points. Miss Peacock and Miss Stone

W., 9-11.50, Winter Session Limited class

This course is intended primarily for students of nursing and physical education who wish a course in the principles of cookery applicable to the care of the sick and who are not eligible to H. A. 133.

Cookery 75L—Large Quantity Cookery. Lectures and laboratory work. 4 points. Miss LA GANKE and assistant

Section II: Tu. and Th., 9-11.50, Winter Session. Repeated as Section III, Spring Session
Section III: M. and W., 7-9.50, p. m., Winter Session. Repeated as Section IV, Spring Session. Begins February 9. Requires registration of fifteen

Limited sections

This course is designed to give practice in handling materials in large quantities for the large family or for small and large institutions, as hospitals, sanitaria, college domitories, restaurants, etc. The course will include some practice in planning and serving of luncheons of varying costs to small groups, as an introduction to larger work. The problem of minimum cost luncheons will be considered with reference to the demands of the cafeteria, the footners and the sched.

factory, and the school.
Prerequisites: Cookery I, 3, 4, 41.
Parallel: Nutrition 71, Cookery I.
Recommended parallel: Administration 75.

Cookery 81L—Practice in Demonstration Cookery. 4 points. Miss Shapleigh and Miss Barrows

Section I: M. and F., 9-11.50, Winter Session. Repeated as

Section II, Spring Session
Section III: Tu. and Th., 2.10-5, Winter Session

Limited sections

This course aims to give practice to students in public lectures and demonstrations such as are useful for general teaching and also for instruction in farmers' institutes, women's clubs, settlements, and extension work.

Prerequisite or parallel: Cookery 1.
Prerequisites: Cookery 3, 4, 41, or experience in teaching household arts.

Cookery 85L—Catering. Lectures and laboratory work. 3 points. § 65 Miss Shapleigh

Section II: Tu. and Th., 2.10-5, Spring Session

Limited sections

This course is intended for students who are interested in the problems connected with the management of tea-rooms and catering establishments. The practical work of the course will include the preparation and the serving of refreshments for small functions such as afternoon teas and buffet luncheons and suppers as well as an opportunity for general practice in cookery for properly qualified students capable of executing a given problem in Prerequisites: Cookery 1.
Prerequisites: Cookery 3, 4, 41, 61, and 75.

Cookery 90—History of Cookery. Lectures and assigned readings. 2 points. Miss Shapleigh

Section I: F., 1.10-3, Winter Session. Repeated as Section II, Spring Session

This course aims to trace the gradual evolution of the kitchen and its appliances and the preparation of food from pre-historic man to the present time with consideration of the effects of climate, geographical position, and the influence of commerce and wars on the choice of foods.

Cookery 99—Advanced Practice. 99a and 99b each I point. Professor VAN ARSDALE and others

Open only to advanced students who are nominated by Professor Van Arsdale as competent for assisting in elementary cookery.

Household Arts 131L—Experimental Cookery. Lectures and laboratory work. 4 points. Professor Van Arsdale, Miss Colman, and Miss CONWAY

Section I: Tu. and Th., 9-11.50, Winter Session. Repeated as

Section II, Spring Session

Section III: Tu. and Th., 2.10-5, Winter Session. Repeated as

Section IV, Spring Session

Limited sections

This course furnishes an introduction to research work by affording an opportunity for quantitative experimental work in various problems in the field of cookery.

Prerequisite or parallel: Cookery 1. Prerequisites: Cookery 3, and for students majoring in Foods and Cookery 4, 41, 61, 75, 81, 85, Chemistry 31 and 41, and Nutrition 71.

Household Arts 133L—Cookery for Invalids. Lectures and laboratory work. 2 points. Miss Peacock and Miss Stone

W., 9-11.50, Spring Session

This course aims to teach the fundamental processes of food preparation as applied to the preparation and serving of dishes for the sick and convalescent.

Prerequisites: Cookery 3 (or equivalent) and Chemistry 1-2, or 3. This course must be taken in conjunction with Household Arts 115.

Household Arts 133x—Practice in Cookery for Invalids. Laboratory work. I point, if taken in conjunction with Household Arts 133 Hours to be assigned

An opportunity for field work in cookery by the preparation of food for actual invalids.

Household Arts 229-230L-Problems in Cookery. 4 points each Session. Professor VAN ARSDALE and other instructors

Conference hour, M., 11, or F., 2.10. From six to eight other hours per

week to be arranged at registration

Limited class

This course is open only to graduate students whose training in cookery is more limited than that prescribed in the major in Foods and Cookery (see \S 62). The work assigned the students will be planned with reference to individual needs.

Prerequisite: Elementary courses in cookery and physical sciences.

Household Arts 232—Research in Cookery. Conferences, laboratory work, and reports. 4 points. Professor Van Arsdale and Miss Colman Section I: M. and W., 2.10-5, Winter Session Section II: M. and W., 9-11.50, Spring Session

Prerequisite: Household Arts (Cookery) 131.

Special and Extension Courses in Cookery

Announcement of special and extension courses in Foods and Cookery will be made in the Announcement of Extension Teaching, which may be obtained from the Secretary of Columbia University.

Summer Session Courses in Foods and Cookery, 1919

Cookery sA-Foods and Cookery in Reconstruction. I point. Professor VAN ARSDALE and others

Cookery s1—Technology of Cookery. 2 points. Professor VAN ARSDALE, Mrs. GUNN, and Miss CONWAY

Cookery s3—Elementary Food Preparation. 3 points. Miss Stone and Miss PEACOCK

Cookery s41—Home Cookery and Table Service. 4 points. Mrs. Gunn and Miss Rock

Cookery s45—Food Preservation (Canning and Drying). 2 points. Miss Peacock and Miss Stone

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Cookery s60—Demonstrations in the "New Cookery." 3 points. Miss Shapleigh

Cookery s71—Invalid Cookery. 2 points. Miss Peacock and Miss

Cookery s77—Large Quantity Cookery. 4 points. Miss La Ganke and Miss DAVIS

Cookery s81-Demonstration Cookery for Reconstruction Workers. 3 points. Miss Shapleigh

Cookery s90—The History of Cookery. I point. Miss Shapleigh

Household Arts s229-Problems in Cookery for Graduate Students. 4 points. Professor VAN ARSDALE and others

Household Arts s231—Experimental Cookery, Advanced. points. Professor VAN ARSDALE and other instructors

II. NUTRITION AND FOOD ECONOMICS

Professors Sherman and Rose. advisers

NOTE—It is possible for a student to specialize in nutrition, during the Junior and Senior years, under the major in Practical Science, § 108. § 67

Nutrition 1L—Elements of Nutrition and Dietetics. Lectures, recitations, and laboratory work. 2 points. Miss MacLeod, Miss Barto, and Professor SHERMAN

Section I: S., 9-11.50, Winter Session. Repeated as

Section II, Spring Session. Rooms 400 T. C. and 401 H. A.

Limited sections

This course describes very simply the essentials of an adequate diet, and the nutritive properties of common food materials. The application of such knowledge to the feeding of individuals and family groups is discussed, with special reference to limitations of cost. Estimations of food values and preparation and service of practical dietaries constitute the laboratory work.

Prerequisites: An elementary knowledge of cookery equivalent to Cookery 3. Students who have not previously studied chemistry are strongly advised to take Chemistry I or 3 in the first half-year as preparation for this course.

Nutrition 2L—Feeding the Sick. Lectures, recitations, and laboratory work. 2 points. Professor ROSE and Miss BARTO Section I: Th., 2.10-5, Winter Session. Repeated as Section II, Spring Session. Room 401 T. C.

Limited sections

This course is designed to supplement Nutrition I for students without the scientific foundation for 71. It includes a discussion of principles of general application in feeding the sick, methods of dietetic treatment for diseases of metabolism, laboratory practice in calculation and preparation of special dietaries.

Prerequisites: Nutrition 1 and Chemistry 23.

Nutrition 71L—Dietetics. Lectures, recitations, and laboratory work. 4 points. Professor Rose, Miss MacLeod, and Miss Barto

Section I: M. and F., 9-11.50, Winter Session. Repeated as

Section II, Spring Session
Section III: Tu. and Th., 9-11.50, Winter Session. Repeated as
Section IV, Spring Session
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Limited sections. Room 401 H. A.

Graduate students should register for H. A. 210.

This course deals with the requirements of the individual throughout infancy, childhood adolescence, adult life, and old age, in the light of the chemistry and physiology of digestion, the energy value of food, the nutritive properties of proteins, fats, carbohydrates, ash constituents, and vitamines. Typical dietaries are planned for each period, and the problem of satisfying diverse requirements in families and other groups is considered, with especial regard to economic and social conditions.

Prerequisites: Chemistry 51 and Cookery 1.

Nutrition 71a—Lectures of above course. 2 points. Open to undergraduates who are excused from the laboratory work on account of previous satisfactory courses taken elsewhere

Household Arts 115—Nutrition and Food Economics. Lectures,

reading, and conferences. 2 points. Professors Sherman and Rose

F., 2.10-4, Spring Session. Room 401 H. A.

This course supplements and extends the work given in the undergraduate courses in dietetics. It treats in some detail: (1) Methods of establishing a quantitative basis in dietetics; (2) problems in the adaptation of diet to disorders of nutrition.

Prerequisites or parallel: Nutrition 71, or Household Arts 210. College courses in organic chemistry and animal biology may be accepted as equivalent preparation.

Household Arts 117L—Laboratory Methods in Nutrition. Lectures and laboratory work. 4 points. Professor Rose and Miss MacLeod

Section I: W. and S., 9-11.50, Winter Session. Repeated as Section II, Spring Session

Room 515 H. A. Limited sections

The consent of the instructor must be obtained before registration. This course is designed to supplement the theoretical work in the science of nutrition by practical experience with some of the more common methods of investigating the nutritive value of foods, and to prepare for more advanced work in the chemistry and economy of human nutrition.

Prerequisite: Quantitative analysis.

Household Arts 210L—Dietetics. For graduate students only. 4 points. Professor Rose, Miss MacLeod, and Miss Barto

Conference hour to be arranged. Other hours same as in Nutrition 71

Limited sections. Room 401 H. A.

Prerequisite: Chemistry 51, or equivalent, and Cookery 3.

Household Arts 210a—Lectures on Dietetics. 2 points. Professor

M. and F., or Tu. and Th., 9-10.30

Open only to graduate students who have completed laboratory courses equivalent to Nutrition 71.

Household Arts 215-216—Practicum in Nutrition and Food Economics. Reports and discussions on assigned reading. 3 points each Session. Professors SHERMAN and Rose

W., 4.10-6, Room 401 H. A.

Special attention is given to the study of recent advances in the science of nutrition and to training for independent work. A reading knowledge of German is highly advantageous.

Open to qualified graduate students with the consent of the instructors.

Prerequisite or parallel: Household Arts 115 or 117, or C. U. Chemistry 175 or equivalent.

Household Arts 218-Investigation in Nutrition or Food Economics. Conferences, laboratory work, and reports. 4 points. Professors Rose or Sherman

Admission and hours to be arranged with instructors

The work of this course may consist of laboratory studies of the nutritive values of foods; feeding or metabolism experiments; dietary studies; the computation and interpretation of dietary observations already recorded. Qualified students may be given opportunity in the nutrition research laboratory to conduct investigations under individual direction during either half-year or throughout the year.

Other Courses Related to Nutrition

The following courses offered by the University Department of Chemistry in Havemeyer Hall are open, with the approval of Professor Sherman, to qualified graduate students of Teachers College: C. U. Chemistry 175— Chemistry of Food and Nutrition. 176—Food Analysis. 275-276— Food Chemistry Seminar. 277-278—Food Chemistry, Research.

The following Teachers College courses described under Biological Chemistry (§ 39) are closely related to studies of nutrition and should be taken by students who give special attention to the physiological problems connected with foods: Chemistry 51—Physiological Chemistry. 52—Pathological Chemistry. Household Arts 127 and 225—Physiological Chemistry.

Biochemical courses relating to nutrition in health and disease are given in the Columbia University Medical School and are open to graduate students of Teachers College who have completed Household Arts 225 and

who obtain written permission from Professor Gies.

Special and Extension Courses in Nutrition

Anouncement of special and extension courses in Nutrition will be made in the Announcement of Extension Teaching, which may be obtained from the Secretary of Columbia University.

Summer Session Courses in Nutrition, 1919

Nutrition s1—Elements of Dietetics. 2 points. Professor Rose and Miss Fedde

Nutrition s71—Dietetics. 4 points. Professor Rose and Miss Fedde

Household Arts s210—Dietetics. 4 points. Professor Rose and

Miss Fedde

See also Summer Session Courses under Chemistry, §§ 37-39

III. TEXTILES AND CLOTHING

Professor Fales, adviser

§ 68 Note—In the Freshman and Sophomore years all students are under the direction of the advisers for the General Curriculum (see § 17).

Required program of studies for the Bachelor's degree:

GENERAL COURSES (see § 14): English A and B, 6 or more points in modern language, History A or B, Hygiene A, 8 points in Science (§ 14), Physical Training A and B, and other general courses (see § 14) to make a total of 45 points. At least 36 points of general courses should be completed in the Freshman and Sophomore years

TECHNICAL COURSES: Clothing 5, 15, 27; Textiles 31; Clothing 33, 35, 45, 55, 57, 65, 75, 85; Fine Arts 1, 2, 3, 21, 22

ELECTIVES: to make a total of 124 points

Four-year students who intend to register for Textiles and Clothing as a professional major in the Junior and Senior years are advised to plan their program of studies as follows: Freshman and Sophomore years: See General Curriculum, § 14. Junior year: History B, Clothing 27, 45, 55, 57, 75, Textiles 31b, c, Fine Arts 21, and electives. Senior year: Economic Science 1 or 79, Clothing 65, 85, Fine Arts 22, and electives.

Students who are preparing to teach textiles and clothing should apply for a major in Household Arts Education, Group A (§ 77), at the beginning of the Junior year instead of following the program for third and fourth years as stated above.

Students who are unable to complete the requirements for a degree or diploma (§ 12), but who can meet the conditions stated in § 13, may apply

for a certificate.

Courses in Textiles and Clothing

Limited sections: For all courses announced as "limited sections" students must reserve places at the time of registration. See 4 in § 24.

TEXTILES

Textiles 31a—Textiles. Lectures. 2 points. Professor FALES Section I: Tu. and Th., 10, Winter Session. Room 418 T. C.

Section II: Tu. and Th., 10, Spring Session

This course considers the primitive form of the textile industries in order to make clear their later development; the present methods of carding, spinning, and weaving; the modern manufacture, and finishing of cotton, wool, silk, linen, and other important fibres, and their properties and values in relation to their manufacture. This course may be elected separately, but is prerequisite to the other parts of the course.

Textiles 31bL—Textile Fabrics. Lectures and laboratory we point supplementary to other parts of Textiles 31. Professor FALES Lectures and laboratory work. I

Section I: W., 2.10-4, Winter Session. Repeated as Section II, Spring Session

Limited sections. Room 302 H. A.

This course concerns itself with the identification and grading of textile materials, their names, kinds, prices, and widths; considers variation of weave in regard to beauty and strength; the use and value of cotton, silk, wool, and linen for clothing and household furnishing.
Prerequisites: Textiles 31a.

Textiles 31cL—Textile Chemistry. Laboratory work. I point supplementary to other textile or clothing courses. Mrs. McGowan

Section I: W., 10-11.50, Winter Session. Repeated as

Section II, Spring Session Limited sections. Room 405 H. A.

This course considers (a) the identification of fibres and substitute material by means of the microscope; (b) the chemical examination of fibres including tests to determine content of cloth and adulteration, and proper use of materials in relation to cleansing and laundering; (c) lectures, and laboratory experiments in dyeing.

Prerequisite: Textile 31a, Chemistry 3, or its equivalent.

Textile Manufacturing—See special circulars which may be obtained from the Secretary of Teachers College about September 10.

HISTORY OF COSTUME, AND DRESS DESIGN

Clothing 33—History of Costume. Lectures. 2 points. Professor FALES

Section I: Tu. and Th., 11, Winter Session. Room 418 T. C.

This course includes a survey of ancient Egyptian, Grecian, early and modern French costumes. It aims to give practical information for the use of students and teachers of dressmaking, costume design, and fashion illustration.

Graduate students should register for this course under Household Arts 203.

Clothing 15L—Drafting and Elementary Dress Design. Laboratory work. 3 points. Miss BALDT Section I: Tu. and Th., 9-11.50, Winter Session. Repeated as

Section II, Spring Session

Section III: M. and F., 2.10-5, Winter Session. Repeated as

Section IV, Spring Session
Special section IX-X: S., 9-11.50, Winter and Spring Sessions. Begins September 27. Requires at least ten students

Limited sections. Room 304 H. A.

This course gives practice in the making of patterns by drafting, modeling, and designing. Foundation patterns of a shirtwaist, shirtwaist sleeve, skirt, fitted waist, fitted sleeve, and kimono blouse are drafted to measure, cut in materials and fitted. From these other patterns are designed and modeled in paper, cambric, and cheesecloth. Good design is emphasized. Students provide all materials. Approximate cost, \$5.

This course is prerequisite to all other dressmaking courses.

Clothing 45L—Applied Dress Design. Laboratory work. 3 points. Miss Evans

Section I: Tu. and Th., 2.10-5, Winter Session. Repeated as

Section II, Spring Session

Section III: Tu. and Th., 9-11.50, Winter Session. Repeated as

Section IV, Spring Session Special section IX-X: S., 9-11.50, Winter and Spring Sessions. Begins September 27. Requires at least ten students

Limited sections. Room 305 H. A.

This course gives practical training in the application to costume of line, color harmony, dark and light, and texture. Historic costume is used as a source of inspiration for much of the work. Practice in using and adapting for different individuals and purposes designs from the current fashion magazines. All designing is done from patterns made in Clothing 15, and by modeling on the form to give practice in actual constructive design. Students provide materials. Approximate cost, \$10.

Prerequisites: Clothing 15, 33, 35, and Fine Arts 1.

Clothing 85L—Advanced Applied Dress Design. Laboratory work. 3 points. Miss Wilmon

M. and F., 2.10-5, Spring Session Limited class. Room 305 H. A.

This course continues the work of Clothing 45. Original designs made from museum inspiration. Field trips to the Metropolitan Museum and the Museum of Natural History. Prerequisites: Clothing 5, 15, 33, 35, 45, 55, 75. Fine Arts 1, 2, and 21.

Fine Arts 21L—Costume Design. 3 points. Miss WILMOT (Sections I and II), Miss Northrup (Sections V-VI)

Section I: M. and F., 9-11.50, Winter Session. Repeated as

Section II, Spring Session
Section V-VI: S., 9-11.50, Winter and Spring Sessions. Begins September 27

Limited sections. Room 305 H. A. (Sections I and II), 507 H. A. (Sections V-VI)

Designing of costumes for various occasions. Study of line, dark and light, color theory and combinations, fabrics and texture combinations. Pencil and water-color drawing. For teachers in household arts education, textiles and clothing, costume design, and for professional designers.

Prerequisite: Fine Arts 1.

Fine Arts 22L—Costume Design. 3 points. Miss WILMOT

M. and F., 2.10-5, Winter Session

Room 305 H. A.

Limited class

Application of the fundamental principles of design to meet commercial and practical demands for costumes. Designing and making of accessories, and decorating of fabrics. Prerequisites: Fine Arts 1, 2, 21, and Clothing 33.

Household Arts 203-204-Problems in Clothing. For graduate students. Lectures, laboratory work, and conferences. 3 points each Session. Professor Fales and other instructors

Tu. and Th., 11, with conferences, Winter Session

Tu. and Th., 9-11.50, Spring Session

Prerequisites: Clothing 5, 15, 35, 45, Fine Arts 1, 2, 21.

Costume Illustration—See under Fine Arts, § 58

SEWING, DRESSMAKING, AND EMBROIDERY

Clothing 5L-Elementary Clothing and Handwork. Laboratory § 69 work. 4 points. Miss White and Miss Evans

Section I: M. and F., 9-11.50, Winter Session. Repeated as

Section II, Spring Session Section III: Tu. and Th., 9-11.50, Winter Session. Repeated as

Section IV, Spring Session
Section V:* Tu. and Th., 2.10-5, Winter Session. Repeated as
Section VI,* Spring Session

Section VII: M. and F., 2.10-5, Winter Session

Special section IX-X: S., 9-11.50, Winter and Spring Sessions. Begins September 27. Requires at least ten students

Limited sections. Room 301 H. A.

* Sections V and VI are open only to students whose major is Household Arts Education, Group B.

This course includes practice in the following: The use of the sewing machine and its attachments; the making of fundamental stitches; the drafting and use of patterns; hand and machine sewing applied to simple garments; knitting, crocheting, darning, patching, and simple embroidery.

Students provide material subject to the approval of the instructor.

Parallel or prerequisite: Fine Arts 1.

This course, or its equivalent, is prerequisite to all dressmaking courses.

Clothing 35L—Dressmaking, Elementary. Laboratory work. points. Miss Baldt

Section I: M. and F., 9-11.50, Winter Session. Repeated as

Section II, Spring Session Section III: Tu. and Th., 2.10-5, Winter Session. Repeated as

Section IV, Spring Session

Also eight evening tailoring lessons, see Clothing 35b, below Limited sections. Room 304 H. A.

This course includes the cutting and making of a middy blouse, a simple wash dress, a tailored silk shirt, a wool skirt, a problem in remodeling garments. Emphasis is laid on the use and adaptation of commercial patterns and those drafted in Clothing 15. Clothing 35b is a required supplement of this course.

Students provide material subject to the approval of the instructor. Approximate cost,

\$35. Prerequisites: Clothing 5, 15, and Fine Arts 1.

Clothing 35b—Tailoring. Supplementary to 35. No credit Section I: Tu. and Th., 7.30-9.30 p. m. Eight lessons beginning November 13. Repeated as

Section II, beginning March 4

Clothing 55L—Dressmaking, Intermediate. Laboratory work. 3 points. Miss HALLETT

Section I: M., Tu., W., Th., F., 9-11.50, first half of Winter Session.

Repeated as

Section II, first half of Spring Session

Section III: M., Tu., W., Th., F., 2.10-5, first half of Winter Session. Repeated as

Section IV, first half of Spring Session Section V: M., Tu., W., Th., F., 9–11.50, second half of Winter Session.

Section VI, second half of Spring Session

Section VII: M., Tu., W., Th., F., 2.10-5, second half of Winter Session. Repeated as

Section VIII, second half of Spring Session

Limited sections

When there is a conflict with other courses, a special arrangement for the required number of hours (90) may be made by conference with the instructor during registration

This course gives practical experience in shop work. Ready-to-wear garments are made and orders are executed under the direction of an experienced trade worker.

Prerequisites: Clothing 5, 15, 33, 35, 45, Fine Arts 1, 2, and 21.

Clothing 65—Embroidery. Laboratory work. 3 points. Miss WHITE M. and F., 2.10–5, Spring Session. Room 301 H. A.

This course includes practice in various kinds of embroidery—French embroidery, for underwear, lingerie waists, and household linen; dress embroideries in white and colors and various specialized embroideries.

Clothing 75L—Dressmaking, Advanced. Laboratory work. points. Miss HALLETT

Limited sections. Same hours as in Clothing 55

When there is a conflict with other courses, a special arrangement for the required number (90) of hours of the course may be made by conference with the instructor during registration

This course gives practical experience in shop work. Ready-to-wear garments are made and orders are executed under the direction of an experienced trade worker. Prerequisites: Clothing 5, 15, 33, 35, 45, 55, Fine Arts 12, and 21.

Clothing 99-Advanced Practice. 99a and 99b each I point. Professor FALES and others

Open only to advanced students who are nominated by Professor Fales as competent for assisting in this department.

Household Arts 201–202L—Problems in Textiles and Clothing. Laboratory and lecture work. 3 points each Session. Professor FALES § 70 and others

Open only to graduate students. Hours to be arranged before registration. Limited class

This course requires at least six hours per week of class instruction or in laboratory.

MILLINERY

Clothing 27—Millinery, Elementary. Laboratory work. 3 points. Mrs. Tobey

Section I: M. and F., 9–11.50, Winter Session. Repeated as

Section II, Spring Session

Section III: Tu. and Th., 9-11.50, Winter Session. Repeated as

Section IV, Spring Session Section V: M. and F., 2.10-5, Winter Session. Repeated as

Section VI, Spring Session

Room 302 H. A.

This course includes practice in the making and covering of frames and in the preparation of trimmings, such as wiring bows, shirrings, puffings, milliners' folds. Students provide material subject to the approval of the instructor.

Clothing 57—Millinery, Advanced. Laboratory work. 3 points. Mrs. Tobey

Section I: Tu. and Th., 2.10-5, Winter Session. Repeated as

Section II, Spring Session

Room 302 H. A.

§ 71

This course continues the work of Clothing 27, with more emphasis on the trimming and elaborate finishing of hats. Prerequisites: Clothing 27.

Special and Extension Courses in Clothing

Announcement of special and extension courses in Textiles and Clothing, which are open to students who do not register for a degree, will be made in the Announcement of Extension Teaching, which may be obtained from the Secretary of Columbia University.

Summer Session Courses in Textiles and Clothing, 1919

Textiles s31c—Textile Chemistry. I point. Mrs. McGowan and

Clothing s5—Elementary Clothing and Hand Work. 4 points. Miss Evans

Clothing s15—Drafting and Elementary Dress Design. 3 points. Mrs. Nelson

Clothing s27-Millinery. 3 points. Mrs. Tobey

Clothing s35—Dressmaking, Elementary. 3 points. Miss BALDT

Clothing s48—Tailoring. I point. Mr. Gross

Clothing s55—Dressmaking, Intermediate. 3 points. Miss HALLETT

Clothing s75—Dressmaking, Advanced. 3 points. Miss HALLETT

IV. HOUSEHOLD AND INSTITUTIONAL ADMINISTRATION

Professors NUTTING and GUNTHER, advisers; Miss FISHER, associate adviser

Note—In the Freshman and Sophomore years all students are under the direction of the advisers for the General Curriculum (see \S 17).

In Administration there are two majors, either of which may lead to the degree of Bachelor of Science. Courses numbered above 100 may be credited toward the Master's degree

A—Household Administration B—Institutional Administration

Students who are unable to complete the requirements for a degree or diploma (§ 12), but who can meet the conditions stated in § 13, may apply for a certificate

A-Household Administration

GENERAL COURSES (see § 14): English A and B, 6 or more points in modern language, History A or B, Hygiene A, 8 points in Science (§ 14), Physical Training A and B, and other general courses (see § 14) to make a total of 45 points. At least 36 points of general courses should be completed in the Freshman and Sophomore years

Technical Courses: Administration A, I, II, 2I, 3I, 44; Biology 4, 57; Chemistry 23 or 31; Nutrition I; Physics 31; Economic Science 79; Cookery I, 2; Education A (Psychology); Nursing 3, 5; Hygiene 72 or 75 Electives: To make a total of 124 points. Recommended electives:

ELECTIVES: To make a total of 124 points. Recommended electives: Fine Arts 14; Economic Science 81; Social Science 89; Administration 10; Clothing 5; Nutrition 2

Four-year students who intend to register for Administration as a professional major in the Junior and Senior years are recommended to plan their program of studies as follows: Freshman and Sophomore years: see General Curriculum, § 14. Junior year: History B, Economic Science 79, Administration 31, Clothing 5, Education A, Nursing 3, 5, and electives. Senior year: Hygiene 75, Physics 31, Administration 10, 44.

This group of courses has been arranged for the purpose of providing instruction in the problems and technical procedures of the modern household. It is designed especially for the use of those who wish to be able to manage the ordinary household.

Students who wish to prepare specifically for the larger and more complicated problems of institutions and have shown such personal qualities as to promise some degree of success in institutional work may be admitted to the major in Institutional Administration.

B—Institution Administration

The programs leading to the degree of Bachelor of Science with a major for the Junior and Senior years in Institutional Administration are designed to prepare mature students of special qualifications for directing institutions, such as college and school dormitories, clubs, settlements, and large households of a similar nature. The requirements for admission to this major are two years of satisfactory general courses (see A above), including preliminary courses in Household Administration in Teachers College, or of similar work in other approved colleges or technical schools.

Special programs will be provided for advanced students who wish to

devote their time to the study of particular problems.

A few mature students who do not meet the above qualifications, but who are especially qualified for admission because of successful practical experience, may be admitted to selected courses as non-matriculated students (§ 7). They are not eligible for certificates (§ 13), but may obtain an official statement from the Registrar.

Programs in Institutional Administration (for Junior and Senior years): \$ 72 For Dietitians in Hospitals or Sanitaria

II. For Managers of School or Factory Lunchrooms

III. For House Directors in College Dormitories, Clubs, Settlements Required courses in I, II, III for degree or certificate: Administration 51, 61, 65, 75, 82, 180, Chemistry 23 or 51, Cookery 75, Nutrition 1 or 2.

Electives subject to adviser's approval to make total of 60 points for the

two years.

Recommended courses: (I) For dietitians: Nutrition 71 and 115. (II) For lunchroom managers: Cookery 61, 85, Administration 71, Nutrition 2. (III) For house directors: Administration 71, Nutrition 2, Fine Arts 14.

Candidates for the degree of Bachelor of Science must complete a total of 124 points in four years, including the courses required in one of the programs above (I, II, or III), and the first and second years in the major

in Household Administration (or its equivalent).

Graduate work—Candidates for the Master's degree with major interest in Administration are advised to consider the following courses: Household Arts 165-166, 180, 185-186, 265-266, 281-282, 291-292, and Education 294B, 221-222. (See also §§ 17-22.)

Courses in Administration

The courses in Household Administration include housework, manage-§ 73 ment, laundering, marketing, house planning, budgets, and household accounts. Those in Institutional Administration consider the parallel problems of institutions, such as dormitories, hospitals, etc.

HOUSEHOLD ADMINISTRATION

Administration A-Principles of Household Administration. Lectures. I point. Professor GUNTHER and Miss FISHER Section I: W., I.10, Winter Session. Repeated as Section II, Spring Session

This course is a general survey of the field of household administration, giving the background of activities in the household, and the meaning of homemaking at the present day. The specialized field in household administration will be considered.

This course is recommended as a prerequisite or parallel to all other courses in Household

Administration.

Administration 1L—Housewifery and Household Management. Lectures and laboratory work. 2 points. Miss Balderston and assistant Section I: M. and F., 9–10.50, Winter Session. Repeated as

Section II, Spring Session

Section III: M. and W., 2.10-4, Winter Session. Repeated as

Section IV, Spring Session

Limited sections. Laboratory, Room 53 H. A.

Treats of kinds of service needed in various parts of the household, and the systematic planning of the daily routine; labor-saving appliances; repairing and renovation; house-hold efficiency with reference to housekeeping methods. Prerequisite: Administration A.

Administration 5—Home Making Adjustments in Social Work. Lectures and reading. 2 points. Miss Winslow
Section I: W., 3.10-5, Winter Session. Repeated as
Section II, Spring Session. Each section requires fifteen students

This course discusses home-making problems from the standpoint of the social worker interested in promoting Americanization, public health, home and community betterment, etc., through the improvement of home living standards. It endeavors to present a fairly vivid picture of home living conditions among small income families here in America and in the countries from which our immigrants most frequently come, and discusses in a simple, concrete way the methods of helping such families to live under local conditions according to better standards with reference to food, clothing, housing, housekeeping, and child care. It also discusses methods of increasing household thrift by budget planning and the critical study of household accounts.

Administration 5x—Field Work in Family Visiting. I point supplementary to Administration 5. Miss Winslow

Hours to be arranged

This course provides opportunity for supervised field work in connection with recognized social agencies, for the purport of acquainting students with the actual home-making problems and methods of helping families to meet these problems more successfully.

Household Arts 106-Social Work in Household Arts. Lectures, conferences, observation, and practice. 4 points. Miss Winslow

Lecture, W., 9, Spring Session

Requires a registration of fifteen students

This course discusses the history and development of social work in household arts, its relationship to other forms of social work, and methods by which it may be strengthened and improved. It provides opportunity for the observation of different types of social work in family visiting, group organization and instruction, and social or economic research. Prerequisite: Administration 5.

Administration 10—Household Management in Practice Apartment. 6 points either Session. Professors Cooley and Gunther in charge

A limited group of household arts students, under the leadership of a mature student whose major is vocational home-making, will carry on all the processes of housekeeping in the apartment. A written report, in diary form with summaries and conclusions, is required.

Administration 11L—Domestic Laundering. Discussions, demonstrations, and laboratory work. 2 points. Miss Balderston and assistant

Section I: Tu., 9-11.50, Winter Session. Repeated as Section II, Spring Session, if there is a registration of twelve students Section V: W., 9-11.50, Winter Session. Repeated as Section VI, Spring Session
Limited sections. Rooms 53 and 57 H. A.

Intended for the teacher or for the person concerned with household management. It presents the principles and processes included in laundry work; space, equipment, and materials required for work in the home; machinery for domestic work, its cost, care, and uses; the processes of laundering; removal of stains, disinfecting; system in the domestic aundry; the household and the commercial laundry.

Prerequisite: Chemistry I or 3, Administration A.

Administration 21L—Marketing. 2 points. Miss LA GANKE

Section I: Tu. and Th., 3.10, Winter Session. Repeated as

Section II, Spring Session
Section III: W., 10-11.50, Winter Session. Repeated as
Section IV, Spring Session

Limited sections

r. Purchasing of food for the household. Discussion of methods and cost of production and distribution, also the protection given to the housewife through food legislation and food inspection. Plans for reducing waste in marketing, conserving the food supply, reducing food costs to the consumer.
2. Purchasing household equipment.

Administration 25L—Housewifery and Laundry. 2 points. Miss

Section I: Tu., 2.10-4, Winter Session. Repeated as

Section II, Spring Session

A course for students of Institution Administration and Household Arts Education who, because of their previous experience, receive from their advisers special permission to enter this combination course.

Administration A is desirable as a parallel course.

Administration 31—House Planning. Lectures and studio work. 2 points

Tu., 3.10-5, Winter Session

This course provides fundamental study of the development of the house; principles of planning and of house construction; different types of dwellings and factors deciding their location.

The students must become familiar with house plans; criticize intelligently the plans of an ordinary country or city house, the tenement or apartment; to plan in sketch form simple problems of country and city dwellings.

Administration 44L—Studies in Household Administration. points. Miss Fisher

Section I: W., 9-10.50, Winter Session. Repeated as Section II, Spring Session

Limited sections

Detailed studies of agencies at work today for development of better conditions in the home. Investigation and research methods by Government Bureaus; household experiment stations; community and co-operative activities. Efficiency studies in housekeeping methods and household materials and equipment will be made. Special visits will be arranged.

Prerequisites: Administration A and 1, or 25.

For courses in Economic Science related to Household Administration see § 40

For courses in Hygiene related to Household Administration see § 47

INSTITUTIONAL ADMINISTRATION

Administration 51—Institution Management. Lectures § 75 observation. 3 points. Miss FISHER and others Lectures: Tu. and Th., 2.10

Visits and round-table conferences, Th., 3.10-5

This course is a study of housekeeping methods and equipment in the various types of institutions. There will be observation in different city institutions, dormitories, hospitals, clubs, cafeteria, and school lunchrooms.

Prerequisite: Administration A and I.

Administration 61—Institution Planning. 2 points

Tu., 3.10-5, Spring Session

This course continues Administration 31, and deals with institutional dwellings, discussing the more prevalent and important types, such as hospitals and sanitaria, clubs, and school dormitories. The factors in construction common to all will be first considered, such as service departments, kitchens, and accessory offices, laundries, planning, and structural equipment. The last half of the second half-year will be devoted exclusively to hospital problems.

Administration 61a—First half of Administration 61. I point

Primarily for students of Institutional Administration.

Prerequisite: Administration 31.

Administration 65L—Institutional Laundering. Discussions, demonstrations, laboratory work. 2 points. Miss Balderston and assistant

Section I: Th., 9-11.50, Winter Session. Repeated as Section II, Spring Session
Limited sections. Room 57 H. A.

It considers planning, equipment, and methods of management, including such topics as machine versus hand-work; the typical laundry apparatus, soap, starches, and other materials; methods of handling different fabrics; staff and financial management. Machine practice in the laundry laboratory is included and opportunities for observation and practice in an institutional laundry.

Prerequisite: Administration II.

Administration 71—Institution Furnishings and Supplies. Lectures and excursions. 2 points. Miss Southard Section I: F., 2.10-4, Winter Session. Repeated as

Section II, Spring Session

Furnishing and equipment of institutions such as college and school dormitories, club settlements, etc. Selection of suitable types of furniture, rugs, bedding, linen, and other equipment and supplies from the standpoints of good taste, comfort, and durability. Problem of cost and replacement.

Administration 75—Institution Food Departments. 2 points. Miss Baker

Section I: W., 10-11.50, Winter Session. Repeated as

Section II, Spring Session

This course deals with planning and equipment of institutional kitchens and accessory dining and lunchrooms; buying food supplies for institutions; contracts; ethics in buying for institutions; grades and quality; cost in relation to season. It also deals with dietaries for school lunchrooms, restaurants, college dormitories, hospitals, and asylums; forms of meal service for institutions.

Prerequisite: Administration 21.

Administration 82—Institution Accounting. 2 points. Miss Leila IOHNSON

Section I: W., 2.10-4, Winter Session

Section II: W., 2.10 and 4.10, Spring Session

Recording and office management of institutional homes, the preparation of statements and reports, and various devices in efficient administration.

Household Arts 180—Institution Organization and Administration. 2 points. Miss FISHER

Section I: M., 2.10-4, Winter Session. Repeated as

Section II, Spring Session

Various systems of organization; charting of organizations, staff, and employees, supervision and organization of service. Office management—organization and filing methods. Prerequisite: Administration A, 51, and 75.

Household Arts 281-282-Special Problems in Administration. For graduate students. 2 points each Session. Professor Gunther and others

Conference hour, M., 2.10 (or one specially arranged), and six hours per week to be arranged at registration. The work assigned the students will be planned with reference to individual needs. The problems may be those related to the management of the small home, or to that of the institution

Prerequisite: Elementary courses in Household Administration.

Household Arts 291-292-Practicum in Household Administration. Conferences and practical work. 4 points. Professor Gunther

Conference hour: M., 2.10, or one specially arranged

This course affords opportunity for the study of practical problems relating to the small house or to that of the institution. It includes a study of outlines and plans for the teaching of Institution Administration.

Other courses advised for advanced students of Administration are in Economic Science (§ 40), Social Science (§ 51), and Hygiene (§ 47).

Special and Extension Courses in Administration

Announcement of special and extension courses in Administration will be made in the Announcement of Extension Teaching, which may be obtained from the Secretary of Columbia University.

Summer Session Courses in Administration, 1919

Administration s1—Housewifery and House Management. points. Miss Blitz

Administration s5—Home Economics for Family Visitors. points. Miss Winslow

Administration s5x—Field Work in Family Visiting. Miss Winslow

Administration s21—Household Purchasing. 2 points. GANKE

Administration s51—Institution Housekeeping. 2 points. Miss BLITZ

Administration s75—Institution Food Departments. 2 points. Miss Baker

MAdministration s85—Problems of the Administrative Dietitian. 2 points, Miss Wells

Household Arts s181—Institution Organization and Administration. 2 points. Miss FISHER

Household Arts s283—Problems of Administration for Graduate Students. 4 points. Miss FISHER

V. GENERAL HOUSEHOLD ARTS

Professor Gunther, adviser

§ 76 Note—In the Freshman and Sophomore years all students are under the direction of the advisers for the General Curriculum (see § 17).

Freshmen who have not decided to specialize in any one of the preceding majors in household arts may follow the general program outlined below for the first two years (General Curriculum). During this period a dominant interest may be discovered, and the student may choose to aim toward some particular technical line, such as cookery, textiles, or administration. Or, she may decide to prepare for teaching household arts. In any of these cases the student will apply for registration in the appropriate major (see § 16) at the beginning of the Professional Curriculum in the Junior year.

Still another possible program for the Junior and Senior years is Homemaking outlined below. This prepares distinctly for home-making, and is not a preparation for the teaching of household arts. Students who have had two years of academic training in other colleges may elect the homemaking major.

GENERAL COURSES (see § 14): English A and B, 6 or more points in modern language, History A or B, Hygiene A, 8 points in Science (§ 14), Physical Training A and B, and other general courses (see § 14), to make a total of 45 points. All general courses should be completed in the Freshman and Sophomore years.

TECHNICAL COURSES: Selected from the several lines of practical arts (especially cookery, nutrition, clothing, household fine arts, hygiene, bacteriology, administration, nursing) under the direction of the adviser.

ELECTIVES: To make a total of 124 points.

Major in Home-Making

Junior and Senior years: Technical courses selected, with approval of adviser, from Cookery, Clothing, Household Fine Arts, Household Administration, Nutrition, Hygiene, Nursing. Electives from technical or general courses. In either year the program may be modified by the Committee on Instruction on the recommendation of the adviser. Students with this major will be permitted to take Education A, B, and 2; and certain other general courses in Education; but no special methods course.

VI. HOUSEHOLD ARTS—FINE ARTS

(See under Fine Arts, §§ 57, 58, House Design and Costume Design)

VII. HOUSEHOLD ARTS EDUCATION

Professors Cooley, Winchell, Spohr, and Miss Marshall, advisers

In Household Arts Education there are four major lines of work or programs for the Senior year, or for graduate students:

I—Teaching of Household Arts in Schools

II—HOUSEHOLD ARTS FOR RURAL EXTENSION WORKERS

\$ 77

III—Supervision of Household Arts in Schools

IV—TEACHING IN VOCATIONAL SCHOOLS

V—Household Arts Education for Graduate Students

I and II lead to the degree of Bachelor of Science and a teacher's diploma (§ 12); III leads to the same degree and a supervisor's diploma; IV leads to the Bachelor's degree and a teacher's diploma. Graduate programs in I–IV may be arranged for the Master's degree, and diplomas for teachers or supervisors. Certificates under the rules stated in § 13 are granted in majors II and IV, but no longer in I and III

I—Teaching of Household Arts in Elementary and Secondary Schools

This program for the degree of Bachelor of Science and a teacher's diploma requires two years (60 points) for students who have had two years of study (64 points) in approved schools of college rank. Students who have completed in Teachers College the first two years of the General Curriculum (see § 14) with the elementary technical courses in foods and cookery, textiles and clothing, practical science, or general household arts, should apply for admission at the beginning of the Junior year to this major in teaching household arts.

The following courses are required in the complete four-year program: General Curriculum (§ 14), or equivalent (64 points); Education A (4 points), B (4 points); 2 (4 points); 135–136, 135x and 136x (Teaching Household Arts, 7 points); also the courses of one of the groups (A, B, C) stated below. Electives to make a total of 124 points. Students wishing to prepare to teach all phases of household arts in schools should elect

Group C

Group A—For teaching Textiles, Clothing, and House-furnishing. Professor Spohr, adviser

Prerequisite: Chemistry 3.

REQUIRED: Textiles 31; Clothing 5, 15, 27, 33, 35, 45, 55; Fine Arts 1, 14, 21; Education A, B, 2, 135-136, 135x, and 136x

ELECTIVES: Administration II; Clothing 57, 75; Fine Arts 22; Eco-

nomic Science 79

Additional courses may be chosen in the clothing and art field, thus making a highly specialized course of study. The student whose main interest is in clothing, but who wishes a broader outlook, should select courses in economic and social science, in foods and nutrition, and in general education

Group B-For teaching Foods, Nutrition, and Sanitation. Professor WINCHELL and Miss MARSHALL, advisers

Prerequisite: Chemistry 1-2, Elementary Physics.

REQUIRED: Chemistry 25, 31 or 41, 51; Biology 4 or 53, and 57; Cookery 1, 3, 41, H. A. 131; Hygiene 72 or 75; Administration 1, 21; Nutrition 71; Education A, B, 2, 135–136, 135x and 136x
Suggested Electives: Administration 11; Economic Science 79; Fine

Arts 1, 14; Nursing 3 and 5

Additional courses may be chosen in foods and nutrition, thus making a highly specialized and thorough course of study. The student whose main interest is in the food problem and yet who wishes a broader outlook should select courses in economic and social sciences, in textiles and clothing, in fine arts, or in advanced work in education

Group C—For teaching Household Arts in Elementary and Secondary Schools. Professor Cooley, adviser

Prerequisite: Chemistry 3.

REQUIRED: Textiles 31a, b; Clothing 5, 15, 27, 35, 45; Fine Arts 1, 14; Chemistry 23, 25; Cookery 1, 3, 41; Nutrition 1, 2; Administration 1, 11; Economic Science 79; Nursing 3; Biology 4 or 53; Education A, B, 2, 135–136, 135x and 136x

Suggested Electives: Hygiene 72 or 75; Biology 57; Clothing 33;

Administration 21; Textiles 31c; Nursing 3, 5; Fine Arts 21

II—Household Arts for Rural Extension Workers. Professor SPOHR, adviser

SPECIAL ADMISSION REQUIREMENT: Two years of approved study in schools of college rank, the equivalent of the General Curriculum (§ 14). Matriculated unclassified students (see § 6) are also accepted. Applicants must have experience in home-making and a knowledge of and a sympathy with the rural home and farm situation. A certificate may be granted (§ 13)

Courses selected from the fields of foods and cookery, nutrition, textiles and clothing, chemistry, bacteriology, hygiene, administration, and nursing

REQUIRED Courses: Education A, 2, 140, 140x, 273-274

SUGGESTED COURSES: Cookery I, 3, 41, 81; Nutrition 71; Clothing 5, 15, 35, 27; Chemistry 23 or 31, 51; Biology 4 or 53, 57; Hygiene 75; Nursing 3, 5; Fine Arts I, 14; Administration I, 3, II; Economic Science

III—Supervision of Household Arts in Schools. Professor Cooley, adviser

Special Admission Requirement: Two years of approved study in schools of college rank. The equivalent of the General Curriculum (§ 14). Successful experience in teaching household arts. Familiarity with the courses required in one of the groups (A, B, C) above

Required Courses: Education A, B, 2; Education 411A or 412A— Criticism and Supervision of Instruction (3 points); Education 137-138—

Supervision in Household Arts (6 points)

ELECTIVES: Approved by the advisers to make a total of 124 points, including advance credit at entrance

IV—Teaching or Directing Household Arts in Vocational Classes or Schools

This is a two-year major (60 points) for the Bachelor's degree for students who have completed the two years (64 points) of the General Curriculum (§ 14), or equivalent in approved schools of college rank. It is also open to matriculated unclassified students (see § 6). A certificate in teaching, not directing, may be granted under the rules stated in § 13

The student should select one of the following programs: (a), (b), (c), (d):

(a) Teaching vocational home-making. Professor Cooley, adviser Special Admission Requirement: Practical home experience satisfactory to the adviser; maturity and special fitness in interests and personality

REQUIRED COURSES: Education A, 2, B, 135-136, 136x. Also, such courses of the major in home-making (see § 76) as are suggested by the adviser. Total, 60 points

(b) Teaching vocational sewing and dressmaking. Professor Cooley,

adviser; Professor Fales, associate adviser

REQUIRED COURSES: Textiles 31, Clothing 15, 33, 35, 45, 55, 75; Fine Arts 1 and 2, or 11, 21; Education A and 2; Education B; Education 135, 136A, and 136x, and electives approved by the advisers to make a total of 60 points

SPECIAL REQUIREMENT: Practical shop experience satisfactory to the advisers, at least 700 hours. The School of Practical Arts is not prepared

to offer this shopwork, and hence the diploma will be granted only to students whose experience elsewhere is accepted by the advisers as equivalent to the required shopwork

(c) Teaching vocational cookery. Professor Winchell, adviser; Profes-

sors Van Arsdale and Gunther, associate advisers

REQUIRED COURSES: Biology 4; Chemistry 3, 23, 25; Administration 1, 11, 21; Household Arts 131 and its prerequisite courses in cookery; Education A and 2; Education B; Education 135, 136A, and 136x; Economic Science I or 79; and electives approved by advisers to make a total of 60 points

Practical work, possibly in connection with the lunchrooms of Teachers

College, satisfactory to the advisers

(d) Directing vocational household arts. Professor Cooley, adviser

For principals and directors of vocational schools, State agents, and

SPECIAL ADMISSION REQUIREMENT: Maturity, scholarship, knowledge of the technical aspects of household arts, experience in teaching household arts, and evidence of executive ability satisfactory to the advisers

REQUIRED SUBJECTS: Economic Science; Social Science; Educational Sociology, Personal Hygiene; Bacteriology and Sanitation; Education 137-138; Education A and B, or equivalent in graduate courses; and electives approved by advisers to make a total of 60 points

V. Household Arts Education—For graduate students. Professors COOLEY and WINCHELL, advisers

Special admission requirements for graduate students specializing in household arts education, see (a), (b), (c), (d), below:

(a) For teaching household arts in schools: Bachelor's or equivalent degree from approved colleges. Completion of equivalent of elementary courses in sciences, and household technology prescribed in major I above, Groups A, B, or C. The requirements for the Master's degree (see §§ 20-22) will be stated for each individual case when the Committee on Admissions receives from an applicant a full statement of work previously accomplished in the line of household arts and related subjects. Some graduate students with good scientific and technical training may be able to complete requirements for the Master's degree in one year. Those with literary and classical training will probably have to spend one year in preliminary scientific and technical courses. Such students are advised to apply for the degree of Bachelor of Science at the end of the preliminary year, and for the Master's degree and Teachers College diploma at the end of the second year.

(b) For teaching household arts in colleges: Same requirements as in (a) for

teaching in schools; and in addition maturity, scholarship, and other quali-

ties that are essential for successful work with adult students.

(c) For supervision of household arts: Degree same as for teaching (see above). Previous study equivalent to one of the groups (A, B, or C) in major I above, and successful experience in teaching household arts.

In making up a program of study for the Master's degree with a major in Household Arts Education, the candidate should confer with the advisers

and select courses as follows:

(a) Two or more courses from: Education 135-136 (Teaching Household Arts in Schools). Education 137-138 (Supervision of Household Arts). Education 337-338 (Practicum in Household Arts). Education 335-336 (Teaching Household Arts in Colleges). Education 411A or 412A (Supervision of Instruction)

(b) At least one course in general education: e.g., educational psychology, history of education, philosophy of education (see § 41 and Announce-

ment of School of Education)

(c) Other courses of graduate credit in household arts, science, education or other departments of the University to make a total of at least 30 points for the Master's degree, not less than six courses of which must be taken in Teachers College (see § 21)

(d) An essay, or its equivalent (§ 22)

Courses in Household Arts Education

Education 135-136—Teaching of Household Arts in Schools. 2 § 79 points each Session. Lectures, conferences, and practical work. Professors Cooley, Winchell, and Spohr, and Miss Marshall Lectures, Tu. and Th., 9
Section I: Textiles and Clothing. Professor Cooley

Section II: Textiles and Clothing. Professor Spohr

Section III: Foods and Sanitation. Professor WINCHELL Section IV: Foods and Sanitation. Miss MARSHALL

Section V: Foods and Sanitation. Miss MARSHALL. M. and W., 1.10

This course for Seniors and graduates is open only to candidates for diplomas in teaching or supervising household arts.
Prerequisites: Education A and 2.

Prerequisite or parallel: Education B.

Education 135x—Preliminary Practical Work in Household Arts

Teaching. I point

This course is preliminary to Education 135-136 and Education 136x for Juniors registered for the major in Household Arts Education, Group A, B, and C. It may be taken during either the Winter or Spring Session. Arrangements should be made with Professors Winchell or Spohr at the time of registration in September

Education 136x—Practical work for Seniors in connection with 135–136. 2 points. Hours to be arranged. Graduate students should register for Education 283 or 284, see § 41.

Students will do their practical work in the line of their major Group. In Group C practical work in both foods and clothing are required.

Education 136A—Teaching of Household Arts in Vocational Schools or Classes for Girls. 2 points

Hours to be arranged for evening lectures and conferences in the Spring Session. A special circular will be issued in January

Education 137-138—Supervision in the Household Arts. Conferences and practical work. 3 points each Session. Professors Cooley and WINCHELL

Tu. and Th., II and hours to be arranged.

This course aims to formulate working principles in the supervision of household arts education, both in the teaching field and for practice teaching. To this end, practice in supervision of teaching is provided under the direction of the instructors. In addition to this, opportunity will be offered to present addresses on household arts subjects before audiences of various types.

Education 123 aims to give the student general principles of supervision as adopted to

audiences of various types.
Education 137 aims to give the student general principles of supervision as adapted to the elementary and secondary field of household arts education. Administration of household arts in the elementary and secondary schools is discussed; curricula, criticism, and measurement of instruction, teachers' conferences. Organization of home economics supervision under the Smith-Hughes Act.
Education 138 is designed to meet the needs of those who will be engaged in the training of teachers of household arts. It includes a survey of educational literature adapted to the use of classes in the methods of teaching household arts; a study of the curricula of departments which are training teachers of household arts; problems of the organization and administration of such departments; the development of a course of study for teacher training classes. training classes.

Prerequisites: Education 135-136, and Education A and 2.

Prerequisite or parallel: Education B. Special requirement: Successful experience in teaching and familiarity with the courses required in Groups A, B, or C, also two years of study in schools of college rank.

Education 140—Household Arts in Rural Communities. 2 points. Professor Spohr

W., 11; F., 1.10, Spring Session

A course for those interested in the problems that confront women living in rural com-

Topics: The domestic, economic, social, and educational needs of farm women; provision for meeting these needs, federal, state, and county organization; the home demonstration agent and her work; the relation of extension work to the rural school; household arts in the rural school. Consideration will be given to problems of organization and administration, and choice of project and subject-matter.

Education 140x—2 points supplementary to Education 140. Professor

Conferences and practical work to give training along the lines required of rural extension teachers.

Education 335-336—Organization and Teaching of Household Arts in Normal Schools and Colleges. 2 points each Session. Professors COOLEY, WINCHELL, and others

M. and W., at 1.10. Room 414 H. A.

For graduate students, but open to Seniors who have completed Educa-

tion 135-136 or equivalent

This course is designed to give prospective directors of departments of household arts a general view of all phases of the subject. The following topics have been selected for the lectures: Organization and general methods (Professors Cooley and Winchell). Organization of household arts in relation to a college curriculum and the general problems of science in relation to practical arts (Director BIGELOW). Household administration (Professor Gunther). Household economics (Professor Andrews). Household biology and sanitation (Professor Broadhurst). Food chemistry and dietetics (Professors Sherman and Rose). Cookery (Professor VAN ARSDALE). Textiles and clothing (Professor Fales). Household fine arts (Professor Dow). Personal hygiene (Professor Wood)

Education 336x—Practice Teaching in Household Arts. 2 points. Professors Van Arsdale and Winchell (foods), Fales and Cooley (clothing), GUNTHER (household administration)

Hours to be arranged in either half-year

Qualified graduate students who register for this course, with approval of instructors, will serve first as assistants and later as assistant teachers in certain special or extension classes. There are opportunities for practice teaching in each of the three lines of household arts (foods, clothing, administration) in each half-year. A student who has qualified in the appropriate technology may elect practice teaching in one or two of the three phases of household arts, each for a half-course requiring five hours per week for a half-year. Opportunity for the proposition of the tunity for practice teaching in other lines of household arts and related sciences may sometimes be arranged for specially qualified students.

Prerequisite or parallel: Education 335-336.

Education 337-338-Practicum in Household Arts Education. Conferences and practical work. 4 points each Session. Professors COOLEY and WINCHELL

Hours to be arranged with either or both instructors before registration

This course affords opportunity for practical investigation of conditions and problems in household arts teaching in schools, colleges, clubs, and social settlements. It includes a study of the development and present status of household arts at home and abroad.

Education 294B—Vocations for Girls and Women. SNEDDEN, COOLEY, and special lecturers. 2 points

M. and W., 5.10, Spring Session

The object of this course will be to give a brief survey of the principal positions and opportunities open to women and girls in the professional, commercial, industrial, agricultural, and home-making fields. Specialists in the several fields will speak on the conditions of employment, possible opportunities, and necessary training for the vocations which they represent. This course is especially recommended to those interested in vocational guidance.

§ 8o

Summer Session Courses in Household Arts Education, 1919

Education s135A—Teaching of Clothing, Textiles, and House Furnishing in Elementary Schools. 2 points. Miss CHACE

Education s135B—Teaching of Foods, Nutrition, and Sanitation in Elementary Schools. 2 points. Miss Marshall

Education s136A—Teaching of Clothing, Textiles, and House Furnishing in Secondary Schools. 2 points. Miss Chace

Education s136B—Teaching of Foods, Nutrition, and Sanitation in Secondary Schools. 2 points. Professor WINCHELL

Education s137—Supervision of Household Arts in Schools. 2 points. Professor Cooley

Education s140—Organization and Administration of Household Arts in Rural Communities. 2 points. Miss Sayles

INDUSTRIAL ARTS

In Industrial Arts there are three majors in the Professional Curriculum (see § 15) leading to the Bachelor's degree:

I—Industrial Drawing and Design (see below)

II—Industrial Arts (see § 83)

III—INDUSTRIAL ARTS EDUCATION (see § 85)

I and II lead to the degree of Bachelor of Science; III to the degree of Bachelor of Science and a diploma (§ 12) in teaching or supervision. Graduate work is offered in III

Students who expect to teach should apply for admission to III (Indus-

trial Arts Education) at the beginning of the Junior year

NOTE—In the Freshman and Sophomore years all students are under the direction of the advisers for the General Curriculum (see § 17).

I. INDUSTRIAL DRAWING AND DESIGN

Required program of studies for the Bachelor's degree:

GENERAL COURSES (see § 14): English A and B, 6 or more points in language, History A or B, Hygiene A, 8 points in Science (§ 14), Physical Training A and B, and other general courses (see § 14) to make a total of 45 points. At least 36 points of general courses should be completed in the Freshman and Sophomore years

TECHNICAL COURSES: Drawing 1-2, 31-32, 33-34, 51-52, 57-58, 61-62, 75-76; Fine Arts, 1, 2, 31-32; Industrial Arts 47-48, 57; Mathematics 31-32 F., 4.10-6; S., 9.10-50. Room 327 Macy ELECTIVES: To make a total of 124 points

Four-year students who intend to register for Drawing as a professional major in the Junior and Senior years are recommended to plan their program of studies as follows: Freshman and Sophomore years: See General Curriculum, § 14. Junior year: Drawing 51-52, Design 57-58, Fine Arts 31-32, and electives. Senior year: History B, Drawing 61-62, Design 75-76, and electives.

Students who are unable to complete the requirements for a degree or diploma, but who can meet the conditions stated in § 13, may apply for a certificate

Drawing 3—Mechanical Drawing, Brief Course. 2 points. Panuska

M. and W., 4.10-6, Winter Session. Room 327 Macy

Drawing 3 should be followed by 4. Intended for students in fine arts, house decoration, and others who do not wish to specialize in mechanical drawing.

Drawing 4—Course 3 continued. 2 points M. and W., 4.10-6, Spring Session

Drawing 31–32—Mechanical and Freehand Perspective Drawing. 2 points each Session. Mr. PANUSKA

Tu. and Th., 4.10-6. Room 327 Macy

Intended to meet the requirements of students in household furnishing or interior decoration, costume design, architecture, and those interested in perspective drawing in general. It consists of making drawings of simple objects, interiors of rooms, showing the location of doors, windows, furniture, rugs. Pencil and pen and ink rendering.

Drawing 33-34—Architectural Drawing. 2 points each Session. F., 4, 10-6; S., 9-10.50. Room 327 Macy

A practical studio course in the making and reading of architectural plans, elevations and constructive details, bearing directly on the requirements of the professional decorator. The studio work will be supplemented by lectures on the various phases of plan-reading. Prerequisite: Drawing 3-4.

Recommended parallel: Administration 31.

Drawing 35—House Planning. 3 points each Session. (Not given in 1919-1920)

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Instruction in the planning of houses, exterior, interior, and surroundings, with special reference to arrangement, appearance, color, convenience, and sanitation.

Open to students in Education, Household Arts, Industrial Arts, and Fine Arts.

Prerequisites: Fine Arts 1 or 11 and 14 Recommended: Fine Arts 3, 69-70, and Drawing 3-4.

Other Courses-Descriptive Geometry, Machine Design, Advanced Mechanical Drawing and Industrial Design, as described in the 1918-1919 Announcement of the School of Practical Arts, may be offered. Students who are interested should apply to the Director of the School of Practical

Summer Session Courses in Drawing, 1919

Drawing s3 and s4—Elementary Mechanical Drawing. course 2 points. Mr. Panuska Each

Drawing s10 and s11—Advanced Mechanical Drawing. Each course 2 points. Mr. Panuska

II. INDUSTRIAL ARTS

Professor Bonser, adviser; Mr. Bowman, associate adviser

§ 83 Required program of studies for the Bachelor's degree:

GENERAL COURSES (see § 14): English A and B, 6 or more points in modern language, History A or B, Hygiene A, 8 points in Science (§ 14), Physical Training A and B, and other general courses (see § 14), to make a total of 45 points. All general courses should be completed in the Freshman and Sophomore years

TECHNICAL COURSES: Industrial Arts 47-48, 57; Metalwork 1-2; Drawing 1-2, 31-32; Fine Arts 1, 2, 31-32; Biology 53 or 57, or Chemistry 25, or Physics 1

ELECTIVES: To make a total of 124 points

Men under twenty years of age will not be admitted as Freshmen or

Sophomores in Industrial Arts

Students who are unable to complete the requirements for a degree or diploma, but who can meet the conditions stated in § 13, may apply for a certificate

Courses in Shopwork

Students who take shopwork in Industrial Arts will be required to purchase from the Bursar a "laboratory ticket," price \$2, the coupons of which are to be used in paying for special materials required for individual use and for damage to or loss of apparatus in any shops, laboratories, or studios of Teachers College. Unused coupons are redeemable at the end of any Session.

Industrial Arts 10—Use and Care of Woods in the Home. Lectures and practical work. I point. Mr. Bowman and assistant

W., 9-11.50, Spring Session

A course for students of household administration and interior decoration. Kinds of wood for house trim and furniture. Finishes and their care.

Industrial Arts 47-48-Industrial Arts for Junior and Regular High Schools. Lectures, shopwork, and excursions. 3 points each Session. Mr. Bowman

Tu. and Th., 2.10-5. Room 29 Macy

This course includes projects and problems appropriate for the upper grades and high school or the junior high school. The room is specially equipped as a demonstration industrial arts shop for working out sample demonstration units of work suitable for industrial arts for pupils of the seventh, eighth, and ninth years.

The course covers the selection of elements from industrial activities, visitations to a contraction of the seventh of

series of industrial plants, the relation of industrial arts work to modern large scale machine production, and the information side of the industrial arts work as it centers around voca-

tional guidance. Adaptation to work in general science will receive attention.

Industrial Arts 47a-48a—Industrial Arts for Junior and Regular High Schools, Briefer Course. 2 points each Session. Mr. BOWMAN S., 9-12.20. Room 29 Macy

Industrial Arts 57—Automobile Mechanics. Lectures and laboratory work. 4 points. Mr. Good and assistants Section I: Tu. and Th., 3.10-6, Winter Session. Room 408 T. C.

Section II: Tu. and Th., 3.10-6, Spring Session Each section requires at least fifteen students

A series of mechanical and electrical problems dealing with the construction, operation, adjustment, and care of the automobile. The work will include assembling and dissembling parts of the mechanism; locating and correcting troubles in connection with a study of the essential principles of gas-engines, carbureters, ignition systems, starting and lighting systems, cooling systems, clutches, gears, the differential, care of tires, lubrication, and fuels. This course does not include driving lessons on the road.

For students of vocational education this course will illustrate the use of the automobile for instruction in high schools and industrial schools

for instruction in high schools and industrial schools.

The lecture-demonstration (3.10-4) may be taken without the laboratory work by students who are permitted by the instructor to register for Industrial Arts 57a, 2 points. This course may not be substituted for any required course in physics.

PRELIMINARY SHOP COURSES

An agreement has been made with Pratt Institute whereby a limited number of students who have had approved elementary shopwork may be registered, with credit in Teachers College in certain classes as follows: Elementary bench work in wood (3 points); bench and cabinet work (3 or 6 points); wood turning, pattern making, and mill work (2 or 4 points). For hours and other details consult, Mr. BOWMAN

ART INDUSTRIES

For courses in Woodcarving, Hammered Metal, Silversmithing, and Jewelry see under Fine Arts § 59

III. INDUSTRIAL ARTS EDUCATION

Professor Bonser, adviser; Mr. Bowman, associate adviser

In Industrial Arts Education there are four lines of work:

A—TEACHING INDUSTRIAL ARTS IN ELEMENTARY SCHOOLS

B-Teaching Industrial Arts in Intermediate and Secondary

C—TEACHING INDUSTRIAL ARTS IN NORMAL SCHOOLS

D-Supervision or Administration of Industrial Arts

A, B, C, and D lead to the degree of Bachelor of Science and a diploma in teaching or supervision. However, in B, C, and D, only candidates for higher degrees are eligible for diplomas in teaching in schools above secon-

dary, or in supervision in those above elementary

A, B, C, and D are normally two-year programs for students who have had two years of study in approved schools of college rank. Students who have completed in Teachers College the first two years of a major in Industrial Drawing or Industrial Arts may apply for transfer at the beginning of the Junior year to Industrial Arts Education

A—Teaching Industrial Arts in Elementary Schools

Education A (4 points); B (4 points); 2 (4 points); 143-144 (4 points); 145-146 (4 points); 146x (2 points); Drawing I or 3 (2 points); Fine Arts 31-32 (6 points); History B (6 points), and electives approved by the adviser

B—Teaching Industrial Arts in Intermediate and Secondary Schools

§ 84

§ 86

Education A (4 points); B (4 points); 2 (4 points); 147-148 or 49-50 (6 points); 148x (2 points); 281 (2 points); Drawing 1-2 (6 points), or 3-4 (4 points); Fine Arts 1-2, or 31-32 (6 points); Mathematics 31-32 (4 points); History B (6 points); and shop courses approved by the adviser

C—Teaching Industrial Arts in Normal Schools. Courses of A above or 149-150, with the addition of Education 147-148 and 213B or 411A-412A, or 413-414, and electives approved by the adviser

D-Supervision or Administration of Industrial Arts

Special admission requirements: Successful experience in teaching industrial arts and technical courses required in major A or B above. Education A (4 points), B (4 points), 2 (4 points), 143-144 (4 points), 145-146, or 147-148 (4 points); and (in the School of Education) electives from Education 241, 291, 292, 295-296, 251A-252A, 451, History 145-146, and other courses approved by the adviser

For graduate students, the above programs (A, B, C, D) will be modified

by the adviser as individual needs require

Courses in Industrial Arts Education

Education 143-144—Industrial Arts for the Elementary Grades.

2 points each Session. Miss PATRICK Section I: M. and W., 2.10-4 Section II: Tu. and Th., 4.10-6

Section III: S., 9-12.20

This course deals with those typical forms of industrial arts work which are practical

in the first six grades of the elementary school.

It aims to secure a method of instruction that will emphasize thinking about concrete objects with relation to industrial uses; the projects include simpler phases of weaving, sewing, clay-working, cookery, wood-, metal-, and paper-working. The application of design to these projects is cared for. The relations of nature-study, geography, history, art, literative the contract of the service of the serv ture, and arithmetic to the course are considered.

Education 143A-144A—Experimental Problems in Industrial Arts for the Elementary Grades. Discussions, reports, and laboratory experiments. 2 points each Session. Miss PATRICK

M., 7.30-9.30 p. m. Room 119 Macy. Begins September 30

An advanced course in industrial arts for the elementary school in which special attention will be given to the curriculum and its content.

Registration only after consultation with the instructor. Prerequisite: Education 143, or equivalent.

Education 143B-144B-Industrial Arts for Social and Religious Workers. 2 points each Session. Miss Patrick

Tu. and Th., 9-10.50. Room 119 Macy

This course includes typical studies of industry which are suitable for clubs and classes not directly connected with regular school instruction. Those interested in the problem of Americanization will find in this course suggestive means and methods.

Industrial Arts for Exceptional Children, Defectives, and Delinquents

Teachers of these special types of pupils will be given individual attention and problems suited to their special needs in any of the sections of Education 143-144.

Education 145-146—Teaching Industrial Arts in Elementary Schools. 2 points each Session. Mrs. Mossman and Professor Bonser M. and W., 3.10

The place of industrial arts in the elementary school; distinction between elementary In place of industrial arts in the elementary school; distinction between elementary industrial arts and secondary or vocational study of the industries; materials and processes in the transformation of foods, textiles, metals, wood, and other products which may be used in elementary school practice; the extent to which the development of skill should be expected in the elementary school; the relation of the industrial arts to the fine arts, to nature-study, geography, arithmetic, and to the other elementary school subjects; organization of courses of study; methods of study and presentation in the industrial arts; supervision of instruction in industrial arts in elementary schools.

The technical projects covered in this course are taught in Education 143-144, which should also be elected. This course may be elected by students not specializing in industrial arts.

Prerequisite: Education A or 19-20 or 255-256. Prerequisite or parallel: Education B or 241 or 291, 292, 295-296.

Education 146x—Practical work supplementary to 145-146. 2 points Hours to be arranged either Session

Education 147-148—Principles and Practice of Teaching Industrial Arts in the Junior High School. 3 points each Session. Mr. BOWMAN

Section I: M., W., F., 10–11.50 Section II: M., W., F., 4.10–6

Section III: S., 9-12.20

Room 29 Macy

This course may be elected by students who do not specialize in industrial arts.

Discussions and readings include consideration of the purposes, organization, development of courses of study, planning, cost, and use of equipment for industrial arts in the junior high school or the upper grades and the first years of high school; and the supervision

of teachers.

The field work includes a study of experimental forms of industrial arts work in typical schools in and about New York, the making of surveys of suburban villages and city schools varying in type and needs, and the organization of courses of study appropriate to these with specifications of needed equipment. Field work also offers opportunities for survey studies in connection with industrial plants

studies in connection with industrial plants.

Practical work includes the use of the demonstration shop and laboratory for the construction of untried or modified projects, and the organizing and teaching of typical industrial arts units in the Speyer Junior High School, or in neighboring public or private schools. The demonstration shop and laboratory is equipped for appropriate work in wood, metal, clay, electrical construction, concrete construction, printing, photography, and studies in machine construction and operation.

Education 148x—Practical work for Seniors in connection with 147–148. 2 points. Hours to be arranged with Mr. Bowman. Graduate students should register for Education 283 or 284, see §41.

Industrial Arts 149 and 150-Analysis of Industries for Teaching and Vocational Guidance. Lectures, reading, demonstrations, and excursions. 3 points each Session. Mr. BOWMAN

Tu. and Th., 9-11.50. Room 29 Macy

This course will analyze a number of industries with reference to the subdivisions of each industry, the aptitudes and training required for each, the wage returns, the hazards, and the opportunities and avenues of advancement.

Industrial Arts 150 will be a repetition of Industrial Arts 149 for new students and advanced and more specialized work for those who wish to continue.

Unit Course

U 141—Teaching of Industrial Arts in Elementary and Secondary Schools. Professor Bonser

M., 7.30 p. m., first five weeks, Spring Session

Special and Extension Courses

Announcement of special and extension courses in Industrial Arts will be made in the Announcement of Extension Teaching, which may be obtained from the Secretary of Columbia University

Summer Session Courses in Industrial Arts, 1919

Education s143a—Industrial Arts for Primary Grades. 2 points. Miss Bentley and Miss McHale

Education s143b—Industrial Arts for Intermediate Grades. points. Miss Patrick

Education s144—Industrial Arts for Intermediate Grades. points. Miss Patrick and Miss House

Education s145—Theory and Practice of Teaching and Supervising Industrial Arts in Elementary Schools. 2 points. Mrs. Mossman and Professor Bonser

§ 87 Education s147—Theory and Practice of Teaching Industrial Arts in Junior High Schools. 2 points. Mr. BOWMAN and Mr. CAMP-BELL

Education \$147x—Practice Teaching Supplementary to Education \$147. 2 points. Mr. BOWMAN and Mr. CAMPBELL

Education s212k—Industrial Arts for Primary Grades, Briefer Course. 1 point. Miss Bentley

Education s212n—Theory and Practice of Teaching Industrial Arts in Junior High Schools. I point. Mr. BOWMAN

Industrial Arts s101—Industrial Arts for the Junior High School. 2 points. Mr. BOWMAN and Mr. CAMPBELL

Industrial Arts s150—Analysis of Industries for Teaching and Vocational Guidance. 2 points. Mr. Bowman

MUSIC AND SPEECH

§ 88 In Music and Speech there are three lines of work:

I—Music (see below)

II—Music Education (see § 92)

III—Speech (see § 94)

I leads to the degree of Bachelor of Science; II leads to the degree of Bachelor of Science and a diploma (§ 12) in teaching or supervision; III, the courses in Speech, are open as electives to students in any department of Teachers College

I. MUSIC

Professor Farnsworth, adviser; Mr. Kraft, associate adviser

§ 89 NOTE—In the Freshman and Sophomore years all students are under the direction of the advisers for the General curriculum (see § 17).

Required program of studies for the Bachelor's degree:

Students who elect this major must show aptitude in the subject and

give evidence of a satisfactory basis in technical skill

GENERAL COURSES (see § 14): English A and B, 6 or more points in modern language, History A or B, Hygiene A, 8 points in Science (§ 14), Physical Training A and B, and other general courses (see § 14) to make a total of 45 points. At least 36 points of general courses should be completed in the Freshman and Sophomore years

TECHNICAL COURSES: Music 13–14, 21–22, 25–26, 32, 33–34, 41–42, 43–44, 169–170, and technical courses in voice, piano, violin, or organ to make

a total of not less than 45 points in technical courses

ELECTIVES: To make a total of 124 points

Four-year students who intend to register for Music as a professional major in the Junior and Senior years are recommended to plan their program of studies as follows: Freshman and Sophomore years: See General Curriculum, § 14. Junior year: History A or B, Music 33–34, technical work, and electives. Senior year: Music 43, 44, 169–170, technical work, and electives.

Students wishing credit for technical work completed before entering Teachers College must make application for such credit before the close of their first Session. Students who take private work with approved teachers while in college may, on examination, receive credit for partial fulfilment of requirements in the technical courses in music. Those who are preparing for such examination must make special record and application in advance on blanks to be obtained from and returned to Professor Farnsworth. Fresh-

MUSIC IOI

men will not be permitted to take private lessons either with or without credit. All others must notify the adviser in advance, even if no credit is

Students who are unable to complete the requirements for a degree or diploma (§ 12), but who can meet the conditions stated in § 13, may apply

for a certificate

GENERAL ART OF MUSIC

Music 25–26—Sight Singing. 2 points each Session. Mr. Kraft M., W., F., 3.10. Room 118 T. C.

This course develops speed in determining what the notation means and skill in its vocal production. The aim of the work is to provide training necessary for all forms of musical activity.

Music 13-14—Tone Thinking and Melodic Dictation. 2 points each Session. Mr. Kraft

M., W., F., 4.10. Room 118 T. C.

This course is basic for all singers, players, and music teachers. It gives practice in describing, in writing and orally, what is heard in music.

Prerequisite: Either Music 25–26 or the ability to write from hearing a simple phrase of

Music 21–22—Epochs in the Development of Music. Lectures with musical illustrations and recitals. 2 points each Session. Professor FARNS-WORTH and Miss WIETHAN

Th., 4.10-5.30. Room 502 H. M. S.

A survey of the history of music with reference to those events that affect our present musical interests giving (a) material and method for the teaching of history and appreciation of music in schools; (b) opportunity for an acquaintance with the art that shall serve as a basis for greater musical enjoyment.

Music 32—Sound as Related to Music. Lectures, excursions, and laboratory work. 2 points. Mr. Good, Mr. Kraft, Professors Wood and WHITLEY

M., 11, Room 408 T. C.; and F., 11, Room 118 T. C., Spring Session

The Monday period is devoted to a study of the physical basis of sound production and transmission and application of physical principles to typical musical instruments. It includes laboratory demonstrations. The Friday period includes lectures on the physiology and psychology of tone production and excursions to instrument factories.

Music 33-34—Introductory Harmony. 2 points each Session. Mr.

M., W., F., 2.10. Room 118 T. C.

The aim of this course is to give practice in melodic invention and chord combinations expressed in simple constructive work. This work forms the basis for the study of musical theory in the public schools.

Prerequisite: Music 13-14.

Music 41-42—Musical Literature. 2 points each Session. Professor FARNSWORTH and Miss WIETHAN

Tu. and Th., 3.10. Room 502 H. M. S.

The aim of the course is to give (a) information about the origin, structure, and manner of production of the various types of musical composition; (b) practice in listening to music and writing about what is heard as an aid to better appreciation. The work is done in connection with the many unusual opportunities New York City offers for hearing music. Students should plan to attend at least one first-class concert per week.

Music 43-44—Applied Harmony. 2 points each Session. Mr. Kraft Tu. and Th., 10. Room 502 H. M. S.

This course is an application of tone thinking and the knowledge of chord structure gained in Music 13-14 and 33-34 to the harmonic problems that arise in the teaching of public school music. Some ability is required to analyze by ear as well as by sight and to do constructive work both at the keyboard and the blackboard. Prerequisite: Music 33-34.

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§ 91

Music 65-66—Chorus Singing and Conducting. 2 points each Session. Mr. Kraft

Tu., Th., 11. Room 502 H. M. S.; W., 11., Chapel

(a) Discussion of the means employed by the conductor in the interpretation of a composition; preparation of the intering employed by the conductor in the interpretation of a composition; preparation of typical programs, giving reasons for choice and order of compositions; review of materials suitable for school choruses; the organization of instrumental music in schools and the arrangement of parts for best effect under given conditions.

(b) Practice in chorus singing, including singing in the choir; and conducting by members of the class.

Music 169-170-Musical Art. Lectures and illustrative work. 2 points each Session. Professor Farnsworth

Tu. and Th., 9. Room 502 H. M. S.

An inquiry into (a) the nature of art and beauty and their relation to every-day living; (b) the character and place of music considered in the light of the preceding; (c) a study of conditions favorable for the better enjoyment of music. The work should serve (1) as a means for clarifying æsthetic and musical judgments and (2) as an aid to those giving courses in musical appreciation.

TECHNICAL COURSES

Voice

Music 15-16-Voice: First Year. Individual work in groups limited to four. 2 points each Session Section I: Miss Daschbach. Room 605 H. A.

In this section special groups are formed for kindergartners, practice being given in the music they are required to use

Hours to be arranged

Section II: Mr. Jolliffe. Room 706 H. A.

Hours to be arranged

Special fee \$20 for each Session. 2 points. Not charged at \$6 per point

Music 35-36—Voice: Second year. 2 points each Session. DASCHBACH and Mr. JOLLIFFE

Hours to be arranged. Given in groups; under same conditions for hours

and fees as for the same instructors in Music 15-16

Prerequisite: Music 15-16.

Music 55-56-Voice: Third year. 2 points each Session. Daschbach and Mr. Jolliffe

Hours to be arranged. Given in groups; under same conditions for hours

and fees as Music 15-16

Prerequisite: Music 35-36.

Music 75-76—Voice: Fourth year. 2 points each Session. DASCHBACH and Mr. JOLLIFFE

Hours to be arranged. Given in groups; under same conditions for hours and fees as Music 15-16

Prerequisite: Music 55-56.

Music 95-96—Voice. 2 points each Session. Mrs. Mehan

Hours to be arranged by adviser. Instruction at Mrs. Mehan's studio Special fee \$100 for each Session. 2 points. Not charged at \$6 per point

Piano

Music 27-28—Piano: First year. 2 points each Session. ZERBE-COWL

Requires at least six hours' practice a week

(a) Individual work in groups limited to four. Once a week at hours to be arranged. Room 118 T. C.

The work presents the technique of playing, sight-reading, accompanying, and drill in methods for concentration and practice, requiring, as a result, the ability to play at least a half dozen pieces from memory. A section will be arranged for students specializing in music for gymnasia; and another section for those training for accompanying. (b) Class lessons: Once a week, combining all groups. Th., 1.10, and other hours to be arranged with the instructor

Special fee \$20 each Session. 2 points. Not charged at \$6 per point

The work includes ear training, interpretation, with examples by both students and instructor. Analyses and estimates are made of a large number of pieces.

Music 37-38—Piano: Second year. 2 points each Session. Mrs. ZERBE-COWL

This course is a continuation of Music 27-28 with especial reference to the literature of the piano. Individual work in groups at hours to be arranged with the instructor.

Class lesson: W., 1.10. Room 118 T. C. Fee for 37–38 same as in Music 27–28

Music 57-58—Piano: Third year. 2 points each Session. Mrs. Zerbe-Cowl

Individual work in groups. Room 118 T. C.

Fee for 57-58 same as in Music 27-28

A course in accompaniment and introductory ensemble playing.

Music 57x—Ensemble Playing. 2 points

Music 67-68—Piano: Fourth year. 2 points each Session. Mrs. ZERBE-COWL

Individual work in groups. Room 118 T. C.

Fee for 67-68 same as in Music 27-28

A course in advanced technique and interpretation of piano music, including modulation, improvisation, and ensemble playing. This course is a continuation of Music 57-58.

Music 67x—Advanced Ensemble Playing. 2 points. Mrs. Zerbe-Cowl

Hours to be arranged

Piano practice—Fee for use of piano is \$4 per half-year for six hours or less per week. Only students registered in Teachers College for at least 12 points per Session and with major work in music will be assigned to piano rooms. Arrange hours at the office of Practical Arts on September 30 or February 10

Organ

 $\mbox{Note--Before entering these courses, students}$ will be expected to pass an examination in elementary piano-playing.

Music 19-20-Organ. 2 points each Session. Mr. KRAFT

Milbank Chapel. Hours to be arranged Individual work in groups limited to four

Special fee \$30 for each half-year. Not charged at \$6 per point

Music 29-30—Organ. 2 points each Session. Mr. LAMOND Special fee \$45 for each half-year. Not charged at \$6 per point

Organ, Advanced—May be arranged. Mr. LAMOND

Organ practice—Fee for use of pipe-organ is 25 cents per hour for not less than twenty hours in a half-year. Arrange hours at the Office of Practical Arts on September 30 or February 10

Violin

Music 39-40-Violin: First year. 2 points each Session. Mr. Stowell

Hours to be arranged. Room 603 H. A.

Individual work in groups limited to four. Requires three students to orm a group

Special fee \$35 for each half-year. Not charged at \$6 per point

The work in this course includes a good position for scales in all keys, bowing, exercises, studies, solos, and special work in the development of good tone, together with ensemble and sight-reading classes.

Music 49-50-Violin: Second year. 2 points each Session. STOWELL

Hours, groups, and fee for 49–50 same as in 39–40

This course includes the study of the violin as begun in Music 39-40. The work includes the scales of three octaves, études, and solos in all positions, ensemble and sight-reading

Violin—Third and Fourth years may be arranged for advanced students

Violin Teaching—See Education 60 on next page

Music 69-70-Violoncello. 2 points each Session. Mr. Stowell

Fee same as in Music 39-40

The work in this course includes a good position for scales in all keys, bowing, exercises, studies, solos, and special work for the development of good tone.

II. MUSIC EDUCATION

Professor Farnsworth, adviser

In Music Education there are two lines of work, each of which is normally a program for the Junior and Seniors years and based on the first two years of the General Curriculum with electives in music (see § 14), or its equivalent in other institutions of college rank:

A—Teaching of School Music B-Supervision of School Music

Each of these leads to the degree of Bachelor of Science and a diploma (§ 12) in teaching or supervision. Graduate students may arrange work in either teaching or supervision. The supervision diploma is not open to students without satisfactory experience in teaching music

Students who are unable to complete the requirements for a degree or diploma, but who can meet the conditions stated in § 13, may apply for a

certificate

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Education A (4 points), Education B (4 points), and Education 2 or an approved substitute (4 points) are required in each major in Music Education. Education A and 2 should be taken in the Junior year, and B in the Senior year

A—Teaching of School Music

Education A, B, 2; 161–162—The Teaching of School Music (4 points); Education 162x (2 points); Music 25–26—Sight-Singing (4 points); Music 41–42—Musical Literature (4 points); Music 32—Sound as Related to Music (2 points); Music 13–14—Tone Thinking (4 points); Music 21–22—Epochs in the Development of Music (4 points); Music 15–16—Voice Culture (4 points); Music 33-34—Harmony (4 points); Music 65-66— Chorus Singing and Conducting (4 points); Speech 1-2—Voice and Diction (4 points); Music 43-44—Applied Harmony (4 points); Music 169-170— Musical Art (4 points); and electives approved by the adviser Special Admission Requirement: Musical ability and some technical

skill with voice and piano

B-Supervision of School Music

Education A, B, 2; 241-242—Philosophy of Education (4 points); Education 163-164—Supervision of School Music (4 points); Education 164x (2 points); together with electives recommended by the adviser

SPECIAL ADMISSION REQUIREMENT: The above major in Teaching of School Music, or its equivalent, except that Music 15-16, 65-66, and Speech 1-2, required in Teaching of School Music, are electives in the supervision work

Courses in Music Education

Education 60—Teaching the Violin and Ensemble Playing. points. Mr. STOWELL

F., 8.15-9.50 p. m., either Session. Requires fifteen students

Observation, practice teaching, and playing with reports and discussions. First hour: Study of the methods and principles of violin teaching, beginning with the first grade. Second hour: Practice in ensemble playing for purposes of instruction.

Education 87-88—Piano Teaching. Lectures, demonstration work, and practice under supervision. 2 points each Session. Mrs. ZERBE-COWL Hours to be arranged

Prerequisite or parallel: Music 57-58.

Education 161–162—The Teaching of School Music. Lectures and practical work. 2 points each Session. Miss LATHAM

Class work, Tu. and Th., 2.10

This course gives (a) a knowledge of the music to be used and the method employed in teaching from the kindergarten through the sixth grade—choice rote songs are learned and sung in the class and practice is given in how to teach them; (b) practice in teaching, in suburban schools, including observation of lessons to children.

Prerequisite: Education 2 or equivalent.

Prerequisite or parallel: Planning and giving lessons under guidance. Music 13-14;

Education 2.

Education 162x—Practical work supplementary to above course.

points

M., 2.10. W. and F. mornings should be kept free for practice teaching in either the Winter or Spring Session. Graduate students should register for Education 283 or 284. See § 41

Education 163-164—Supervision of School Music. Lectures and practical work. 2 points each Session. Professor Farnsworth

M., 10-11.50

This course includes a discussion of what is meant by thinking and studying as applied to music; of the principles that should guide in planning music courses for schools; of methods for applying such principles from the first grade through the high school. Observation and discussion of music teaching in the practice school as well as in schools in and about New York City are also included.

Text-book: Farnsworth's Education Through Music.

Education 164x—Practical work supplementary to 163-164. 2 points Hours the same as for 162x

Education 363-364—Practicum in the Teaching of School Music. 3 points each Session. Professor FARNSWORTH

Hours to be arranged

This course consists of investigations of problems connected with the teaching of music, presented in discussions and papers. Open only to graduate students.

Education 181—School and Community Festivals. See § 41

Attention is also called to the following related courses in other parts of the University open to qualified students registered in the School of Practical Arts with a major in Music Education. Permission must be obtained from the adviser and the Director of the School of Practical Arts:

C. U. Music 1-2 and 3-4—History of Music; 7-8 Harmony; 9-10—Advanced Harmony and Elementary Form; 11-12—Counterpoint; 13-14—Composition and Orchestration; 15-16—Orchestral Instruments and Their Uses; 31-32-University Orchestra; eX2-University Chorus; 101-102-Advanced Composition and Orchestration; 103-104—Orchestration and Symphonic Form

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Special and Extension Courses in Music

Announcement of special and extension courses in Music will be made in the Announcement of Extension Teaching, which may be obtained from the Secretary of Columbia University

Summer Session Courses in Music, 1919

Education s161a—The Teaching of School Music. 2 points. Miss BUERMEYER

Education s161b—Demonstration in the Teaching of School Music and the Use of the Talking Machine. I point. MEYER and assistant

Music s15—Voice Culture. 2 points. Mr. Jolliffe

Music s17—Piano Technic and Interpretation. 2 points. Miss MACDONALD

Music s25—Sight-Singing and Melodic Dictation. 2 points. Mr. KRAFT

Music s65—The Conducting of School Music. 2 points. Mr. KRAFT Music s98 and s99—Technical Music, Advanced. Each course 2 points.

SPEECH

Speech 1-2-Voice and Diction, Introductory. Lectures, class exer-§ 94 cises, and individual practice. 2 points each Session. Professor LATHAM and assistant

Section I: W. and F., 9 Section II: Tu. and Th., 9

(1) Breathing, carrying tone distinct utterance; correction of individual faults; a practical study of phonetics leading to standard pronunciation of English and to a working knowledge of the facts of speech necessary for teaching primary reading and to a more properties.

correction of faults of utterance.

(2) A study of the elements of vocal expression: Pitch, inflection, time, etc.; practice in speaking with notes and without notes; effective use of the voice in teaching and lecturing.

Speech 1A—2 points. A brief course similar to Speech 1-2, for students unable to take the complete course

Section I: S., 9-10.50, Winter Session Section II: Tu. and Th., 10, Winter Session Section III: Tu. and Th., 10, Spring Session

Each section requires fifteen students

Speech 3-4-Story-telling and Reading, Introductory. Lectures, practice, critisicm, and recitals. 2 points each Session. Mrs. HALLOCK Section I: W. and F., 11

Section II: Tu. and Th., 4.10

In the first half of the course, the principles of selection, study, and presentation are considered; the literature used is that suited to the interests of little children; the work is adapted to the needs of beginners and the teachers of beginners.

In the second half of the course, the principles of criticism and style of rendering are considered; the literature is suited to older children and adults; original story making is encouraged; opportunity is given for practice before larger groups of students and friends.

Speech 3A-2 points. A brief course similar to Speech 3-4, for students unable to take the complete course

Section I: Tu. and Th., 10, Winter Session Section II: S., 11–12.50, Spring Session

Speech 51-52—Dramatic Reading and Speaking. Lectures, practice, criticism, and recitals. 2 points each Session. Professor LATHAM and assistant

W. and F., 3.10

This course is open to students who have had Speech 1-2 and 3-4, or similar courses. In the first half of the course, the principles of vocal expression are studied; practice in reading plays is required; opportunity is given for taking part in the Teachers College Festival. In the second half of the course, scenes are acted in the class, and opportunity is given for program recitals of chosen types of literature and of original compositions.

Speech 57—Speech Correction. 2 points. Mrs. SCRIPTURE S., 11–12.50, Winter Session. Requires fifteen students. May be repeated or extended in Spring Session

This is primarily a course for teachers who must undertake the correction of speech defects in schools. The defects to be studied will include stuttering, lisping, cluttering, and negligent articulation. There will be lectures upon the causes of these defects and upon the theories advanced by prominent authorities concerning them. The study required will be upon the anatomy of the vocal organs, phonetics, diagnosis of speech defects, tongue and mouth gymnastics, and corrective exercises.

Patients from the Vanderbilt Clinic will be in attendance at all lectures where exercises are to be explained, and every detail will be fully illustrated by them.

Education 167-168—Teaching of Speech (Oral English). Lectures, practical demonstration, reports. 2 points each Session. Professor LATHAM and assistant

W. and F., 2.10

Study of the nature and value of the various speech exercise in schools; observation of lessons; discussion of methods of teaching story-telling, oral reading, phonetics, voice, recitation from memory, educational dramatics, and oral composition; practice in the class. Prerequisite: Education A and Speech 1-2, or equivalent course.

Prerequisite or parallel: Education B and Speech 3-4, 51-52, or equivalent courses.

Education 181—School and Community Festivals. Lectures, discussions, and practical work in planning festivals and organizing committees. 2 points. Professor LATHAM, assisted by Professors Wood, FARNS-WORTH, Dow, ABBOTT, and VAN ARSDALE; and Miss Colby, Miss Wil-MOT, Miss NORTHRUP, Miss DILLER, and Miss BEAUMONT W. and F., 4.10, Winter Session

The lectures take up the problems of festival making in schools and communities, and show possible ways of solving them to further educational and social ends. Especial attention is given to available sources of material for the art forms involved, and original effort is fostered. The student's reading is limited to his immediate needs and interests, and does not cover the subject historically, except for those desiring to acquaint themselves with some chosen period or people. Opportunity is given for practical work in the Teachers College Festival.

Education 181x—Practical Work Supplementary to Education **181.** 2 points

Hours to be arranged

Requires at least 90 hours of practical work in connection with the Teachers College Festival. A written report, in diary form, must be submitted. Consult Professor Latham before registering.

Education 182—Dramatization. 2 points. Professor LATHAM and assistant

S., 9–10.50, Spring Session

This course is given to meet the rapidly increasing demand for guidance in the selection and use of material for original dramatic exercises in schools and social centers. Simple plays will be made and acted. The work of the class will be done in small groups interested to work together, and the special aims of the individual pupil will be considered in the practical work and the reading, as far as that can be done without sacrificing necessary attention to certain basic principles of educational dramatics.

Summer Session Courses in Speech, 1919 Speech s3—Story-telling, Introductory. Mrs. HALLOCK Speech s57—Speech Correction. Mrs. Scripture

NURSING AND HEALTH

Professors Nutting, Goodrich, and Stewart, advisers

In Nursing and Health there are two main groups of students, the first group composed of graduate nurses preparing for various special branches of nursing work (Majors I to V), and the other group composed of students who are entering for the full professional training in nursing or for special branches of public health and sanitary work allied to nursing or who are preparing as teachers of occupational work in hospitals (Majors VI to VIII)

I—TEACHING IN SCHOOLS OF NURSING

II—Administration of Schools of Nursing

III-Public Health Nursing

IV—School Nursing

V—EDUCATION AND SUPERVISION IN PUBLIC HEALTH NURSING

VI—Nursing

VII—TEACHING OCCUPATIONS IN HOSPITALS

VIII—Public Health

Requirements for Graduate Nurses. Candidates for the degree of Bachelor of Science with a diploma in Nursing and Health must fulfil the following general requirements: English, 12 points; a modern language, 6 points; history, 6 points; science, 8 points with the subjects outlined in any one of the following majors (I-V) and additional approved work of college grade to make a total of 124 points. Previous professional work in approved training schools for nurses is accepted as part of this requirement, the numner of points credit depending on the length of the course and the subjects

Students who are unable to complete the requirements for a degree or diploma, but who can meet the conditions stated in § 13, may apply for a certificate. For those who have not had satisfactory previous experience in these fields, a year of practical work will be required before the certificate

is granted.

A small number of mature students of high professional qualifications who are unable to meet the full educational requirements may be admitted to selected courses as non-matriculated (see § 7) students. They are not eligible for a certificate, but may obtain from the Registrar an official statement of the courses completed.

For information concerning the Teachers College diplomas and their

value as supplementary to holders of regular college degrees, see § 12.

A few senior student nurses from recognized hospitals may be admitted to selected courses if they meet the required educational and professional qualifications, and if they are recommended by the principals of their nursing schools.

Requirements for students entering for the full professional training in Nursing and for the Bachelor of Science degree:

An arrangement has been made with the Presbyterian Hospital, New York City, by which a limited number of high-school graduates who meet the requirements of matriculation in the Freshman class (§ 2) may work for the Bachelor of Science degree and at the same time pursue the regular course of nursing training. The combined curriculum requires five years of work, the time being divided about equally between the College and

the Hospital.

The first two years will be spent in residence at the College, taking certain prescribed general academic subjects including the sciences on which nursing work is based. The second two years will be spent entirely at the Nursing School of the Presbyterian Hospital, where the student will receive both theoretical and practical training in nursing. The final year will be spent largely at the College in the study of special subjects leading to public health nursing, teaching, and supervision in nursing schools, or other special branches of nursing work. The fees for the work at Teachers College are \$6 per point and \$5 University fee in every Session in which

the student is registered for courses. At the Hospital there is an entrance fee of \$15; but no tuition fees are required for the period spent in the Hospital, and there will be no expenses for room and board during this period. Until 1921, advanced credit will be given to a limited number of students who have taken certain of the required academic subjects in other approved colleges or normal schools.

For further information regarding this combination course, apply to the

Department of Nursing and Health.

I-Teaching in Schools of Nursing. Professors Nutting and STEWART, advisers

The following program of study is designed to prepare qualified nurses

for positions as teachers and assistants in Schools of Nursing:

Education A (4 points); Education 2 (4 points); Education B (4 points); Education 170—Teaching of Nursing Principles and Methods (2 points); Education 171—Teaching In Schools of Nursing (2 points); Education 171X—Teaching Practice (2 points); Chemistry 3—Elements of Chemistry (4 points); Biology 53—Applied Biology (4 points); Biology 57—Elementary Microbiology (2 points); Hygiene 75—Sanitary Science (2 points); Nursing 21-22—History of Nursing and Contemporary Problems (4 points); Social Science 89–90—Modern Social Problems and Social Legislation (4 points), and recommended electives

II—Administration of Schools of Nursing. Professors Nutting and

GOODRICH, advisers

The following program of study is designed to prepare women of superior educational and professional qualifications and experience for positions as Superintendents in Schools of Nursing:

Education A (4 points); Education 2 (4 points); Education B (4 points). Education 171—Teaching in Schools of Nursing (2 points); Education 173—174—Administration in Schools of Nursing (4 points); Education 175—Current Problems in Nursing Education (2 points); Nursing 21—22—History of Nursing and Contemporary Problems (4 points); Hygiene 75—Sanitary Science (2 points); Nursing 83—Hospital Administration (3 points); Social Science 89–90—Modern Social Problems and Social Legislation (4 points), and recommended electives.

III—Public Health Nursing. Professor Nutting, adviser, assisted

by Miss Hudson

The following program of study is designed to prepare qualified nurses for positions as visiting nurses in city or rural districts, as tuberculosis and infant welfare nurses; as industrial nurses in shops and factories; as social service nurses in hospitals; or as board of health assistants:

Education A (4 points).

Education A (4 points).

Nursing 21—22—History of Nursing and Contemporary Problems (4 points); Nursing 41—Principles of Public Health Nursing (2 points); Nursing 42—Fields of Public Health Nursing (2 points); Nursing 44—Medical Inspection and School Nursing (2 points); Nursing 45—Control of Communicable Disease (2 points); Hygiene 75—Sanitary Science (2 points); Hygiene 76—Industrial Hygiene (2 points); Social Science 89—90—Modern Social Problems and Social Legislation (4 points); Administration 5—Home Economics for Family Visitors (2 points); Social Science 87—Principles of Modern Social Work (2 points), and recommended electives.

IV—School Nursing. Professor Nutting, adviser

The following program of study is designed to prepare qualified nurses for positions as school nurses and assistants in medical inspection:

Education A (4 points); Education 2 (4 points); Education B (4 points),
Nursing 21-22—History of Nursing and Contemporary Problems (4 points); Nursing
41—Principles of Public Health Nursing (2 points); Nursing 44—Medical Inspection and
School Nursing (2 points); Education 176—Teaching of Health Principles (2 points);
Education 176x—Teaching Practice (1 point); Education 184—Educational Hygiene (2
points); Nursing 45—Control of Communicable Disease (2 points); Hygiene (2
points); Nursing 45—Control of Communicable Disease (2 points); Administration 5—Home
Economics for Family Visitors (2 points); Social Science 89-90—Modern Social Problems
and Social Legislation (4 points); Social Science 87—Principles of Modern Social Work
(2 points), and recommended electives.

V—Education and Supervision in Public Health Nursing. Professor Nutting, adviser

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The following program of study is designed to prepare qualified nurses for positions as superintendents, teachers, and supervisors in visiting nursing and other forms of public health nursing which are predominantly educational in their nature:

Education A (4 points); Education 2 (4 points); Education B (4 points).

Education 176—Teaching of Health Principles (2 points); Education 176x—Teaching Practice (1 point); Education 178—Organization and Supervision in Public Health Nursing (2 points); Nursing 21-22—History of Nursing and Contemporary Problems (4 points); Nursing 44—Medical Inspection and School Nursing (2 points); Nursing (2 points); Nursing 44—Medical Inspection and School Nursing (2 points); Nursing (2 points); Nursing 45—Control of Communicable Disease (2 points); Hygiene 75—Sanitary Science (2 points); Hygiene 76—Industrial Hygiene (2 points); Hygiene 77—Public Health Administration (2 points); Social Science 89—90—Modern Social Problems and Social Legislation (4 points); Administration 5—Home Economics for Family Visitors (2 points); Social Science 87—Principles of Modern Social Work (2 points); and recommended electives.

VI—Nursing. Professors Nutting and Stewart, advisers

The following program is designed for students who wish to take the full professional training in a hospital and at the same time qualify for the Bachelor of Science degree:

Freshman year: English A—Composition and Literature (6 points); History A—Modern and Contemporary History (6 points); a modern language (6 points); Chemistry (3—Elements of Chemistry (4 points); Physics I—Applied Physics (4 points); Biology 4—Human Biology (4 points); Biology 57—Elementary Microbiology (2 points); Physical Training A (2 points).

Sophomore year: English B—Composition and Literature (4 points); Education A—Educational Psychology (4 points); Cookery 71—Invalid Cookery (2 points); Nutrition 1—Elementary Food Economics (2 points); Nursing 16—Human Anatomy (2 points); Social Science 89—Modern Social Problems (2 points); Social Science 110—Public Health and Standard of Living (2 points); Nursing 21—History of Nursing (2 points); Nursing 14—Materia Medica (2 points); Nursing 10—Elementary Nursing (3 points); Nursing 11—Hygiene and Sanitation for Nurses (2 points); Physical Training B (2 points).

Third and Fourth years: Theoretical and practical work prescribed by the Presbyterian Hospital School of Nursing.

Senior or Fifth year: The student will choose one of the special lines of work outlined under Majors I, III, or IV.

VII—Teaching of Occupations in Hospitals. Professor NUTTING and Miss Johnson, advisers

This program of study is designed for students who wish to prepare themselves as teachers of various crafts and other occupations in homes, hospitals and institutions for chronic patients.

The following courses are recommended:

Education A (4 points). Education in Hospitals (2 points); Education 179—Methods of Teaching Occupations in Hospitals (2 points); Education 175x—Practice Teaching (3 points); Fine Arts 1-2—Design (6 points); Textiles 85—Weaving (3 points); Fine Arts 5A—Basketry (3 points); Industrial Arts 48A—Elementary Woodwork (2 points); Metalworking 1-2—Hammered Metal, Silversmithing, and Jewelry (4 points); Fine Arts 25—Clay Modelling (2 points); Nursing 17—Occupations for Invalids (2 points); Clothing 3—Embroidery, Crocheting, Knitting, and Plain Sewing (2 points); Biology 4—Human Biology (4 points); Psychology e1—Mental Hygiene (2 points)

VIII—Public Health

Students who wish to give special attention to problems of public sanitation may elect Practical Science (see § 108) as a major in the Junior and Senior years and arrange programs with Professor BROADHURST, adviser

Courses in Nursing and Health

Courses starred (*) are open to students of any department of the College. All other courses are intended for graduate nurses or for those who are definitely preparing for one of the majors in this department

* Nursing 3—Physical Care of Infants and Small Children. Lectures, demonstrations, and readings. 2 points. Miss HAWKINSON Section I: M., 3.10-5, Winter Session. Repeated as Section II, Spring Session

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Section III: Tu., 10-11.50, Winter Session. Repeated as Section IV, Spring Session

Each section requires fifteen students

Presents the theory and practice of the care of infants and small children, in a series of lectures and demonstrations. The following topics will be treated: The basis in physiological knowledge for the rational care of the child; the physical care of the infant and child: presenting in turn such topics as the daily regime of the infant, food, sleep, bathing, clothing, the child, from the third to the sixth year, nursery, clothing, food.

Observation in a day nursery will be arranged for those desiring it.

* Nursing 5—Home Nursing. Lectures, demonstrations, and laboratory practice. 2 points. Miss HAWKINSON

Lecture: Tu., 2.10, Winter and Spring Sessions

Demonstration and practice:

Section I: Th., 2.10-4, Winter Session. Repeated as

Section II, Spring Session

Section III: F., 2.10-4, Winter Session. Repeated as

Section IV, Spring Session

Each section requires fifteen students

This course deals with the prevention and care of illness in the home. It discusses such topics as proper surroundings for the sick, the early recognition of the common symptoms of disease, food for the sick, prevention and care of common ailments, such as colds, sore throats, etc., care of sick children and the aged, including simple nursing procedures and first aid treatment for common household emergencies.

* Nursing 105—Health Problems for Religious and Social Workers. Lectures and demonstrations. 2 points. Professor Stewart and other lecturers

M., W., F., 10, Spring Session

This course is designed to meet the needs of home and foreign missionaries, and others engaged in similar forms of social and religious work. It will discuss the more essential principles of sanitation as applied to the home and community, the recognition of common evidences of disease and general principles of prevention, the physical care of babies and older children, and the simpler measures of nursing care and first aid which may be employed by amateur workers.

Nursing 10-Elementary Nursing. Lectures, demonstrations, and practical work. 3 points.

Hours to be arranged in the Spring Session

This course is intended for students who expect to enter the hospital training school. It takes up the fundamental principles of good nursing and the elementary nursing procedures which the student will require in the first part of her training—the care of the patient's surroundings, care of a patient in bed, feeding, medications, charting, and the simpler treatments in general medical and surgical cases.

Nursing 11—Hygiene and Sanitation for Nurses. 2 points.

Hours to be arranged in the Winter Session

This course is intended to meet the needs of students who are preparing to enter nursing schools. It takes up the essentials of personal hygiene, and the principles and practice of household hygiene as applied to the work of the student nurse. The cleaning and care of the hospital ward, ventilation, heating, lighting, plumbing, the care of kitchens and refrigerators, and other practical housekeeping and sanitary problems will be discussed.

Nursing 14—Materia Medica. Lectures, demonstrations, and laboratory work. 2 points

W., 9-11.50, Spring Session

This course includes a discussion of drugs, their sources, crude forms, and preparation, with laboratory demonstrations; proper methods of administration with physiological, therapeutic, and tonic action; their dosage, cost, and care; practical problems in weights and measures, and in the preparation of solutions.

Nursing 14x—I point supplementary to the above

Hours to be arranged

These conferences are especially for graduate nurses who are preparing to teach in schools of nursing, and who wish to make more extended study of the therapeutic action of drugs, and of the methods of teaching this subject.

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Nursing 16—Human Anatomy. Lectures, demonstrations, and laboratory work, 2 points

S., 9-11.50, Spring Session Requires fifteen students

This course supplements the work in Biology 4 and 53, laying special emphasis on regional anatomy, the gross anatomy of the bony and muscular systems, visceral anatomy, and the distribution and location of the more important blood vessels, lymphatics, and

* Nursing 17—Occupations for Invalids. 2 points. Miss Collins Hours to be arranged in the Winter Session

Requires fifteen students

This course deals with occupations as a diversional, curative, or re-educational factor in various types of illness. Occupations especially adapted to use in bed or the hospital ward are emphasized, including knotting, netting, rake knitting, simple rug making, seat weaving in cane and rush, leather work, and novelties. The care and cost of materials and the use of waste materials will be considered; also the choice of amusements, games, puzzles,

Nursing 21–22—History of Nursing and Contemporary Problems. Lectures, reading, and reports. 2 points each Session. Professors NUTTING and STEWART, and special lecturers

Nursing 21:

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Section I: Tu. and Th., 2.10, Winter Session (for graduate nurses) Section II: M. and W., 2.10, Spring Session (for pre-nursing group) Nursing 22: Tu. and Th., 2.10, Spring Session

Takes up the historical development of nursing under monastic, military, and secular control, traces the rise and growth of an educational system, with its results in the hospital and the community, and considers the present status of nursing schools with relation to hospitals, to medicine, and to public health. The organization of the professional field, educational and social developments, associations, affiliations, and State regulation are considered.

\$ 100 Nursing 121-122—History of Nursing. Lectures and conferences. 2 points each Session. Professors NUTTING and STEWART

Hours to be arranged

This course is intended for graduate students who wish to make a more extended study of certain phases of nursing history.

Nursing 41—Principles of Public Health Nursing. Lectures, conferences, and field work. 2 points. Miss Hudson

Section I: Tu. and Th., 9, Winter Session Section II: W., 2.10, and Th., 9, Spring Session Section III: W., 2.10-5; Th., 9, Winter Session

Intended to give a general grasp of the problems in nursing to be met in families where there is sickness; the measures to be followed in various types of families, to preserve unity, to relieve immediate needs, and to teach hygiene, preventive methods, and the handling in the home of acute, chronic, or communicable disease. The relation of the district nurse to the physician, the health authorities, the public school, the hospital, and the various other co-operating agencies, municipal and philanthropic, will be considered.

Nursing 42—Fields of Public Health Nursing. Lectures, conferences, and field work. 2 points. Miss Hudson and others

F., 2.10, and Th., 9 (for field work), Spring Session

The principles of public health nursing are here applied to the more specialized fields of The principles of pulsic health nursing are nere applied to the more specialized helds of pre-natal and child welfare work, tuberculosis nursing, industrial welfare, and rural nursing. Methods of organizing and conducting such branches of work will be discussed and opportunity will be given for studying a few of the more characteristic types in operation. The co-ordination of all these and other activities in the community through health centers and health districts will also be considered.

Nursing 43—Hospital Social Service. Lectures, conferences, and I point if taken in connection with selected courses in public field work. health nursing.

Requires twelve students

M., 3.10, Winter Session. Field work to be arranged

This course deals with the history, aims, organization, and administration of social work in hospitals and dispensaries. It studies the practical handling of individual problems, the agencies with which the social service bureau co-operates and the methods of record keeping. The duties of committees and the province and training of volunteer workers are considered, and also the relationship of the bureau to the medical and nursing departments of the hospital. Observation and field work in hospital social service departments will be provided.

Nursing 44—Medical Inspection and School Nursing. 2 points. Dr. Baker

F., 3.10, Spring Session

Field work to be arranged for those specializing in School Nursing

Deals with school nursing in its relation to public health and the education of the child. It discusses the history of school nursing, its development under health and educational authorities, its relation to medical inspection and to district nursing organizations. It deals with the supervision of the child in the school, and in the home when excluded from the school, the relationship between the school and the home, and the instruction of mothers and of children. The preventive aspects of carefully organized school work, the technique of school nursing, typical forms of organization and special methods adapted to rural and small communities. Reports, statistics, equipment, and appliances, etc., are considered in detail. Milk stations and their management are included. Opportunity for practice and observation is provided in the schools of New York.

Nursing 144—Nursing in Relation to Municipal Health Work. 2 points. Dr. Baker

F., 5.10, Spring Session

This course is intended to give properly qualified graduate students an opportunity for the more detailed study and investigation of special phases of milk station and infant welfare work, school nursing, the control of communicable disease, and other nursing activities in the municipal health field.

Nursing 45—Control of Communicable Disease. 2 points. F., 2.10-4, Winter Session

This course, designed for nurses in public health work, deals with the methods of application by nurses of modern scientific medical knowledge in the prevention of disease. It considers the causes of prevalent communicable disease, such as tuberculosis, typhoid fever, scarlet fever, diphtheria, and the venereal diseases, showing the prevailing measures for prevention and methods of control and care. It also discusses certain important but less common diseases, such as smallpox, etc.

Nursing 82—Supervision in Hospitals and Training Schools. Lectures and conferences. 2 points. Miss Doty Tu. and Th., 10, Spring Session

An introductory course designed for teachers and supervisors who require a general knowledge of organization and administration in hospitals and training schools. It deals with the relation of departments to each other, and with the ordinary problems of management and supervision; with the arrangement of practical training of student nurses, the proper co-ordination of theory and practice, and the preparation of ward records and reports.

Nursing 83—Principles of Hospital Administration. Lectures and field work. 3 points. M. and W., 3.10; F., 2.10-5, Winter Session

This course considers the general problem of hospitals, their relation to the community and its needs, their organization and general administration; the functions of trustees and committees; the staff of officers, and their relations to medical and nursing education; the general organization of departments, including dispensaries, clinics, and social service, their mutual problems and relationships.

The particular problems of hospital housekeeping, the furnishing and equipment of wards and other departments; organization of service in each, duties, salaries, and conditions of life and work province and duties of heads of kitchens, laundries, linen and supply rooms, and the handling of goods, linen, household and surgical supplies, are considered in detail

detail.

Nursing 86—Practical Problems in Hospital Housekeeping. Class and laboratory work. I point if taken in connection with Education 170 or Nursing 82. Miss DOTY

Tu., 4.10, Spring Session

The purpose of this course is to apply modern scientific principles and methods to the housekeeping problems of the hospital, particularly those concerned with the cleaning and care of equipment, furnishings, floors, etc., and with the selection, cost, and use of common § 99

hospital supplies. The course is intended for those who are preparing to teach and supervise nurses in training schools.

Education 170—Teaching of Nursing Principles and Methods. Lectures, observations, and lesson plans. 2 points. Professor Stewart Tu. and Th., 11, Spring Session

This course is intended for those who are to teach practical nursing. It discusses the aims and standards of such teaching, the scientific principles involved in the nursing care of the patient, the selection and arrangement of subject-matter, the planning of lessons, and demonstrations, methods employed in securing efficiency and skill in technique, the equipment of classrooms, and the use of reference books, illustrative material, and other teaching

Education 170x—Nursing Practice. Observations, demonstrations, and practice in nursing procedures. I point supplementary to above course M., 10-11.50, Spring Session

Education 171—Teaching in Schools of Nursing. Lectures and conferences. 2 points. Professor STEWART

Tu. and Th., 11, Winter Session

This course deals primarily with the curriculum of the nursing school, outlining the aims to be achieved through the course of study, the selection and arrangement of subjects in the curriculum, the general content of each, the special methods of teaching suitable in the various subjects, the selection and use of text and reference books, and other teaching materials. Students will observe several classes in the teaching of pupil nurses.

Education 171x—Observation and practice work, supplementary to above course. 2 points

Hours to be arranged

8 100

Education 173–174—Administration in Schools of Nursing. Lectures, conferences, observations, and written work. 2 points each Session. Professor GOODRICH

Tu. and Th., 9, Spring Session

This course deals with the problems of training school organization in connection with hospitals of various types or under other forms of government. It considers the essentials in nature and variety of hospital service, in administrative and teaching staff, and in equipment for the maintenance of educational work. It deals with the general problem of training school management; the qualifications, personality, and training of superintendent or principal; her general duties and responsibilities on the administrative side; the arrangement, control, and supervision of practical work in wards or other hospital departments; the appointment and direction of assistants and ward staff.

Prerequisite or parallel: Education A.

Education 175—Current Problems in the Education of Nurses. Lectures, readings, and reports. 2 points. Professor NUTTING

M. and W., 4.10, Spring Session

This course deals with special problems in education peculiar to training schools for nurses. It discusses their economic status, cost of maintenance, tuition fees, allowances, scholarships, and loan funds. The questions of entrance requirements, credits, hours of practical work, health, and social aspects of student life and other present-day problems are considered. The relations of schools of nursing to universities are considered.

Education 176—Teaching of Health Principles. Lectures, observation, and practical work. 2 points. Miss Hudson M. and W., 11, Spring Session

This course for public health nurses takes up the teaching of home and personal hygiene, child care and feeding, home nursing and first aid, etc., to groups of mothers, young girls, and school children, as well as to individuals in their homes. It discusses the material for such classes, its sources, arrangement, and special problems of presentation, giving special attention to the problem of the immigrant mother and the teaching of heterogeneous groups through suitable illustrative material.

Prerequisite: Education A.

Education 176x—Teaching Practice. I point, supplementary to above course

Hours to be arranged

Education 177—Training of Public Health Nurses. Lectures, reports, and observations. 2 points

Hours to be arranged in the Spring Session

This course will present the methods of organizing and developing courses of instruction for training nurses for the various fields of public health work. It will consider the material available for fundamental work in hospital training schools and will study the resources and methods of other institutions in which courses of study and practical training have been established.

Education 178—Organization and Supervision in Public Health Nursing. Lectures, conferences, and observations. 2 points.

Tu., 4.10, Spring Session

This course deals with the practical problems of organization and supervision in the various forms of public health work in which groups of nurses are brought together. It considers these problems as they relate to visiting nurses' associations; to the divisions of nursing in state and city departments of health or of education. The direction and development of such work, the duties of superintendent, supervisors, and staff, questions of support and status, and relationships with other organizations are presented.

Education 179—Methods of Teaching Occupations in Hospitals. Lectures and observations. 2 points. Miss JOHNSON

N., 4.10

The aim is to give an understanding of the underlying principles of occupation therapy, and to give instruction in methods of teaching the sick and convalescents.

Education 179x—Practice Teaching and Conferences in Connection with 179. 3 points

Hours to be arranged

Education 371–372—Practicum in Nursing. 2 points each Session. Professors NUTTING and STEWART

M., 2.10

This course, open only to graduates, provides for detailed study of the special problems of associations, organization, and legislation in relation to educational work in nursing—the movements, social and otherwise, affecting the curriculum, the various branches of professional work in institutions and in municipal service.

Hygiene—See courses in Sanitary Science. Industrial Hygiene, and Public Health Administration announced under Hygiene, § 47

Social Science 87—Principles of Modern Social Work. 2 points For description, see under Social Science (§ 51)

Special and Extension Courses in Nursing and Health

Announcement of special and extension courses in Nursing and Health will be made in the Announcement of Extension Teaching, which may be obtained from the Secretary of Columbia University.

Summer Session Courses in Nursing and Health, 1919

Nursing s3—Physical Care of Infants and Small Children. 2 points

Nursing s5—Home Nursing and Emergencies. 2 points. Miss
HAWKINSON

Nursing s41—Public Health Nursing. 2 points. Miss Hudson

Education s170—Teaching of Nursing Principles and Methods. 2 points. Miss Gray

Education s176—Teaching of Health Principles. I point in connection with Nursing s41. Miss Hudson

Social Science s87—Principles of Modern Social Work. 2 points. Miss Leal

Nursing s42—Special Fields in Public Health Nursing. I point in connection with Nursing s41. Miss Hudson and special lecturers

Nursing s82—Supervision in Hospitals and Training Schools. 2 points. Miss Doty

PHYSICAL EDUCATION

Professors Wood and Williams, advisers; Miss Colby, associate adviser § 101

Note—In the Freshman and Sophomore years all students are under the direction of the advisers for the General Curriculum (see § 17).

In Physical Education there are three major lines of work:

A—TEACHING OF HYGIENE AND PHYSICAL EDUCATION

B—Supervision of Playgrounds C—Supervision of Hygiene and Physical Education

The work in A and B may be included in four-year programs (124 points), leading to the degree of Bachelor of Science, and a diploma (§ 12). Graduate work may also be arranged in these lines. The work in supervision is open only to graduate students

A—Teaching of Hygiene and Physical Education

GENERAL COURSES (see § 14): English A and B, 6 or more points in modern language, History A or B, Hygiene A, 8 points in Science (§ 14), Physical Training A and B, and other general courses (see § 14) to make a total of 45 points. At least 36 points of general courses should be completed in the Freshman and Sophomore years

TECHNICAL COURSES: Physical Education 5-6, 9-10, 55-56, 57-58, 59-

60, 65-66

Four-year students who intend to register for Physical Education as a professional major in the Junior and Senior years are recommended to plan a program of studies as follows: Freshman and Sophomore years: See General Curriculum, § 14.

Junior and Senior years: Education A (4 points); Education B (4 points); Education 2

Junior and Senior years: Education A (4 points), Education B (4 points).

Education 180-100—Theory and Practice of Teaching Physical Education (6 points);
Education 183-184—Educational Hygiene (4 points); Physical Education 5-6—Applied
Anatomy (4 points); Physical Education 9-10—Junior Practice and Methods (8 points);
Physical Education 55-56—Applied Physiology (4 points); Physical Education 57-58—
Normal Diagnosis and Anthropometry (4 points); Physical Education 56-60—Practice
(8 points); Physical Education 65-66—Kinesiology and Corrective Gymnastics (4 points);
Education 187-188—Hygiene of Childhood and Adolescence (4 points).

B—Supervision of Playgrounds

For the Bachelor's degree and a diploma in this line, the program of the above major (A) in the Junior and Senior years will be modified by the adviser so that special attention may be given to playground problems

C—Supervision of Hygiene and Physical Education

SPECIAL ADMISSION REQUIREMENT: Bachelor's degree; successful experience in teaching, and familiarity with the introductory courses required for the diploma in the Teaching of Hygiene and Physical Education (see A above)

REQUIRED COURSES: Education 411-412—Criticism and supervision of struction. Education 389-390—Practicum in Hygiene and Physical instruction.

Education. Other courses recommended by the adviser

Courses for General Students

§ 102 Hygiene A1-A2-Health and Conduct. Open only to women. Lectures, recitations, reading, and reports. I point each Session. Professor Wood, Miss Daniell, and Miss Hawkinson

Th., 1.10. Room 164 Thompson

This course considers fundamental facts and principles concerning the human body in relation to health and general efficiency. The topics include: Prevention of disease; treatment of emergencies; improvement of health by hygienic means; and relation of right living to personal character, conduct, and to social ethics.

Hygiene 72—Personal and General Hygiene. 2 points. Professor WILLIAMS

W. and F., 11, Spring Session

This course is intended for advanced students and is not open to those who are required to take Hygiene A as Freshmen. It will consider the principles of hygiene, both personal and general, and their practical application to everyday life.

Physical Exercise for Health—The following courses, Physical Training A, B, C, D, are primarily health work for students of all departments of Teachers College. Each course requires 45 hours of work per Session of fifteen weeks, and sections requiring 30 hours in the gymnasium must be supplemented by 15 hours of other work, preferably outdoors, approved by the instructor in charge

According to a special rule of the Faculty of Practical Arts, a Sophomore, Junior, or Senior may add Physical Training A, B, C or D to the standard

maximum program of 18 points for the Winter or Spring Session

Physical Training A1-A2—For women. I point each Session. Miss YUNCK and assistants

Section I: W. and F., 9. General gymnastics, games, etc. Section II: Tu. and Th., 11. General gymnastics, games, etc.

Section III: M. and W., 11. Folk dancing

Section IV: M. and W., 2.10. Folk dancing Section V: Tu. and Th., 4.10. For Freshmen preparing for the major in Physical Education

No other combinations permitted

The work of this course is arranged with reference to the needs of the individual student as indicated by the physical examination and study of personal tendencies. The hygienic, corrective, and educative effects of exercises are sought in the arrangements of movements. The exercises include those with and without apparatus: Gymnastics, drills, games, rhythmic exercises and swimming.

Physical Training B1-B2—For women. I point each Session. Miss

YUNCK and assistants

Sections I and III are required for Sophomores preparing for the major in Physical Education. Such students should register for B1-B2. Section

I and C1-C2, Section III

Section I: Tu. and Th., 2.10. Folk dancing
Section III: M. and W., 4.10. General gymnastics

Section IV: Tu. and Th., 4.10. Athletics

This course continues the training begun in Physical Training A, increasing the variety of movements and developing the skill of the student in rhythmic exercises and games.

Hygiene A and Physical Training A for Men—Men in the Freshman class of the School of Practical Arts should register for Columbia College Physical Education A1-A2 (3 points), A3 or A4 (1 point), as a substitute for Hygiene A and Physical Training A

Hours to be arranged

Physical Training B for Men—Sophomore men should register for Columbia College Physical Training 1-2 (2 points) in place of B Hours to be arranged

Physical Training C1-C2. For women. I point each Session. Miss YUNCK and assistants

Sections I–IV: Same hours and work as in B1–B2 above

Section V: Tu. and Th., 4.10. Room 255 Thompson Section VI: M. and W., 5.10

Section VIII: Outdoor athletics and hikes. Hours for groups to be arranged, especially on Saturdays or other days

Sections V and VI are arranged with reference to the needs of mature students who wish the simpler forms of exercise. These include gymnastic exercises, games, swimming, and elementary dancing. The outdoor work of Section VIII will be under the direction of group leaders who will emphasize the principles of outdoor exercise for health.

§ 103

Physical Training D1-D2. For women. I point each Session. Miss YUNCK and assistants

Sections I-IV: Same work and hours as in B₁-B₂ above Sections V and VI: Same hours and work as in C₁-C₂ above

Section VII: M. and W., 3.10. Room 255 Thompson Section VIII: Outdoor athletics and hikes. See under C1-C2 above

Section VII is arranged to give practice in dancing to Juniors and Seniors who have already had training equivalent to that in courses A, B, C.

Professional Courses

Physical Education 5-6-Applied Anatomy. Lectures, demonstrations, and recitations. 2 points each Session. Professor WILLIAMS Section I: Tu. and Th., 3.10. Room 252 Thompson

This course deals with the structure of the human body from the standpoint of education Particular attention is given to the anatomy of growth and development.

Physical Education 9-10—Junior Practice and Methods. lecture and eight periods of practical work each week. 4 points each Session. Miss Colby, Miss Frost, Miss March, Mr. Holm, and special lecturers

(a) Lecture, F., 2.10

(b) Folk dancing and methods, Tu., W., F., 10 (c) Natural gymnastics and swimming, M. and Th., 10; Th., 11

(d) Formal gymnastics, M. and Th., 9 (optional)

(a) and (b) are open to men

(a) Lectures on music appreciation by Professor Farnsworth, with special reference to physical education, in the Winter Session; speech and diction, by Mrs. Hallock, in the Spring Session.

(b) The practice work in dancing follows the evolution of the dance through national dancing and includes a knowledge of the rhythms of the dance. In methods a study is made of the presentation of dance material and practice is given in the handling of classes.

(c) The practice in natural gymnastics includes the natural movements involved in games, dancing, and athletic activities, and provides practice in the technique of club activities for boys and girls in city and country. Instruction in the use of various forms of apparatus is included. Thorough instruction is also provided in swimming and life-saving.

(d) The practice and methods in formal gymnastics is optional and provides training and methods in formal types of exercises for those who may be required to teach such

and methods in formal types of exercises for those who may be required to teach such gymnastics of conventional and formal types.

Physical Education 11-12—Practice for Men. 3 points each Session. Professor Williams

Hours to be arranged, University Gymnasium

One lecture and six hours of practical work each week

The lecture will be devoted to consideration of athletics, games, and gymnastics from the standpoint of the teacher of physical education. The practical work will include participation in games, swimming, and work in the gymnasium, with particular emphasis for the individual student upon work in which he has previously had least training. Students will be given as much opportunity as possible to assist in various phases of practical work

Physical Education 54—Games, Folk Dancing, and Corrective Gymnastics. 2 points

M., W., F., 10, Spring Session. Requires fifteen students

This condensed course is designed for school nurses and others who are interested in helping to introduce simple and wholesome forms of recreation into schools and communities. Certain physical defects common among school children will also be discussed and corrective exercises demonstrated. The work will include theory and practice in dramatic games, games of skill, simple folk dancing, and corrective gymnastics.

Physical Education 154—Recreation Work in Social Centers. 2 points. Miss Colby and assistant

M., W., F., 10, Spring Session

Requires fifteen students

This condensed course is planned for social and religious workers who expect to direct recreation activities in social centers. It will consist of one hour lecture and two of practical work. The lecture will take up the theory of selection of suitable material and discussion of methods of handling various groups.

Physical Education 55-56—Applied Physiology. Lectures, recitations, and laboratory work. 2 points each Session. Dr. Burton-Opitz and Miss March

Tu., 2.10; Th., 1.10-3. Rooms 251 and 252 Thompson

This course deals with the fundamental facts and principles of physiology and is designed to familiarize the student through demonstrations, laboratory methods, and practical experiments, with the effects of different kinds of activity upon the various physiological systems of the body, with especial reference to the problems of hygiene and physical edu-

Physical Education 57-58—Normal Diagnosis and Anthropometry. Lectures and laboratory work. 2 points each Session. Dr. KEYES and Miss

M. and W., 1.10. Room 252 Thompson

The purpose of this course is to give the student a working knowledge of the variations of the normal types of the course is to give the student a working knowledge of the variations of the normal types of the human organism; to consider methods for determining conditions of the organs of the body. The course will include the following: Recording of personal and family history; its value, its interpretation in relation to heredity, environment and health; anthropometry; its methods of making general health examinations, including special methods for examining ears, eyes, circulatory and respiratory system, spine, and feet.

Students will have practical experience in all of the different methods and procedures studied, including practical work in school inspection.

Physical Education 59-60—Advanced Practice. One lecture and eight periods of practice each week. 4 points each Session. Miss Colby, Miss March, Miss Frost, Miss Yunck, and Mr. Holm

(a) Lecture, F., 2.10

(b) Dancing and swimming, Tu. and Th., 3; M., 10

(c) Natural gymnastics, athletics, and methods, Tu. and Th., 10; F., 9 (d) Formal gymnastics and methods, M., 3.10; Tu., 9 (optional)

(a) The lectures treat the dance as a form of art and present the evolution of the dancedrama and the relation of the dance to other arts of movement. The meaning of the dance is studied in relation to its origin and place among primitive people. These lectures will not be given in 1919-1920, but the lectures in (a) Physical Education 9-10, will be substituted.

(b) The dance practice includes advanced folk and national dancing, and practice in the interpretation of and composition of dances. Advanced instruction in swimming, life saving, and aquatic games will be provided.

(c) The instruction in natural gymnastics includes a continuation of the natural functional forms of activity involved in games, dancing, athletics, and dramatic activities which may be adapted to practice of technique and the arrangement of drills. Athletic instruction is included in practice and coaching of games such as basketball, hockey, indoor baseball, hand ball, bowling, field and track athletics.

The methods hour is given to the consideration of material for the elementary school with reference to the psychological development and needs of the child. This is to include games, athletics, and dances. The idea is to bring out the progression necessary in the different materials as preliminary to the building of a curriculum.

(d) Instruction in formal gymnastics and methods is elective. This will involve study and practice of formal exercises and types of apparatus included in syllabi and courses of

study of city and state systems of physical education.

Physical Education 61-62—Advanced Practice for Men. 3 points each Session. Professor WILLIAMS

Hours to be arranged, University Gymnasium

One hour of conference and discussion and six hours of practice work each week. The hour of lecture conference, and discussion will provide for consideration of professional problems of teaching, coaching, umpiring, and supervision of athletics, games, field days, and athletic meets. The various professional problems of physical education for colleges, universities, normal schools, and high schools will be considered.

The practice will include the fullest participation under supervision in the professional phases of physical education outlined which may be afforded by the University and by the many opportunities afforded by New York City and surroundings.

Physical Education 64—History of Physical Education. Lectures, collateral reading, reports, and discussions. 2 points

(Not given in 1919-1920)

This course deals with the following topics: Bodily activities and play of primitive man; physical education among the different civilized races before and during the Middle Ages § 104

with particular attention to the Greeks and Romans; modern movement and development of national systems of physical education in Sweden, Germany, and England; present progress in this field of education in the United States and in the different European Countries, with a comparison of the different so-called "systems" of physical training; principles underlying the science of physical education.

Physical Education 65-66—Kinesiology and Corrective Gymnastics. Lectures and practice. 2 points each Session. Miss Frost and Miss CROUNSE

W., 9; M. and W., 4.10. Room 252 Thompson

This course deals with the principles and mechanisms of bodily movements. The follow-Ins course deals with the principles and mechanisms of bodily movements. The following topics are considered: Importance of posture in relation to the health of the body and to the efficiency of different movements; effects of various exercises upon the tissues and organs of the body. It also presents in a practical way faults of posture commonly found in growing children. Lateral curvature of the spine, round shoulders, and weak, flat feet will be studied. Students will practice individual corrective work with groups of children under supervision, and opportunity will be given for voluntary work or observation of some of the hospital clinics in the city.

Physical Education 77-78—The Dramatic Game. practice. I point each Session. Miss Colby Theory and

Tu. and Th., 5.10. Room 253 Thompson

This course, for Juniors and Seniors, takes up fundamental play rhythms and music; interpretation through characterization and development of plot; the study of dramatic and singing games, showing their historical and racial significance; the development of simple folk dances from singing games; trade dances; Indian dances; pantomimes and ceremonies. The aim is to show the relation of this material to the psychological development of the child.

The course includes assigned reading, note-books, and original constructive work. The material is suitable for use in the first six grades.

Education 101A-102A—Dramatic Arts, Plays, Games, and Dances of Early Childhood. I point each Session. Miss BURKE

S., 11

For description, see under Kindergarten in School of Education Announcement

Physical Education 295-296—Problems in Hygiene and Physical Education. Open only to graduate students. 3 points each Session. Professors WOOD, WILLIAMS, and others

Conference hours and other hours to be arranged with the associate

adviser before registration

Physical Education 295x-296x—Supplementary to 295-296. 3 points each Session. Open only to graduate students. Professors Wood, Wil-LIAMS, and others

Conference hours and other hours to be arranged before registration

Education 183-184—Educational Hygiene. Lectures, collateral reading, demonstration, and reports. 2 points each Session. Professor

M. and W., 2.10. Room 164 Thompson

Education 183 takes up health education with special reference to the needs and work of teachers. This course deals with hygiene and sanitation, considering the range and distribution of the material in this field for the needs of the individual and as a basis of health instruction. In the professional side of the course, students prepare typical lessons for health teaching of various types and present some of these to the class in the form of practice teaching. Students have experience also in the preparation of courses of study in the field of health education.

the held of health education.

Education 184 deals with various phases of school hygiene. The chief topics of the course are: The place and scope of school hygiene in education; the physical organization and comparative development of the child; health examinations of children; control of communicable diseases in schools; discovery and treatment of chronic health defects; school sanitation; the hygiene of instruction; principles of health education with a brief review of materials and methods taken up in detail in the Winter Session; physical education with discussion of the various types of motor activities involved in the physical education of children of different ages and different types; application of principles of hygiene and physical education in the special education of abnormal and exceptional children.

§ 105

Education 185–186—Play and Playgrounds, and Community Centers. Lectures, required reading, and observation. 2 points each Session. Mr. GIBNEY

Tu. and Th., 5.10. Room 164 Thompson

This course is intended for men and women who are preparing for work in recreation systems and playgrounds. It aims to enrich the content of playground and community center work, to encourage the formation of standards, to develop a capacity for leadership, and to equip students for professional careers in the field covered.

Education 186x—Practical work in connection with 185-186. 2 points. Mr. Gibney

Hours to be arranged by the instructor and approved by the adviser

Practice work in playgrounds, recreation centers, community centers, and community councils of New York City. Actual development of leadership of special activities; investigations; observation tours. Written reports required.

Education 187-188—Hygiene of Childhood and Adolescence. Lectures, reference reading, discussions, and reports. 2 points each Session. Professor Wood

Lecture S., 11. Conferences, S., 12. Room 164 Thompson

Education 187 deals with the following topics: The principle of projected consciousness as applied in the nurture and education of children; brief review of organic evolution, heredity and prenatal influence; consideration of eugenics; application of biologic principles in care of infancy and childhood; relation of physical welfare to other values in the

life of the child.

Education 188 deals with the following topics: Significance and value of the lengthened period of immaturity in the human species; adolescent development with normal and abnormal characteristics; sex development with the direct and indirect influences upon the individual at various stages of growth; mental and emotional hygiene; education of the instincts and emotions; education for parenthood involving sex-hygiene and sexeducation, with other factors.

Education 189-190—Teaching of Hygiene and Physical Education. Lectures and discussions. 2 points each Session. Professors Wood and Williams, and assistants

Tu. and Th., 4.10. Room 164 Thompson

In the class work the following topics will be presented: Scope of physical education and school hygiene; relation of physical education to education in general; material and methods involved in health examinations—hygienic care of pupils—medical inspections—supervision of school sanitation and hygiene of instruction—teaching of hygiene in schools—teaching and supervision of motor activities involved in physical education; problems of organization and administration; physical education in the elementary school; relation between the social occupations of the child and activities in the gymnasium; presentation of rational technic of the various forms of activity.

Education 190x—Practical work for Seniors in connection with 189–190. 2 points. Hours to be arranged with Miss Colby. Graduate students should register for Education 283 or 284, see § 41

Education 193-194—Dramatic Expression in Physical Education. 2 points each Session. Miss Colby and Madame Alberti

W. and F., 3.10. Room 253 Thompson

This course aims to give Physical Education students and others an understanding of and appreciation for the art side in Physical Education and the relation it bears to the sister arts—Music and Literature. The course will consider the correlation of motor activities with the subject-matter of the grades, and will show such material as folk and interpretative dances, pantomime, mimetic exercises of sports and games, marches and drills can be used in developing the dramatic instinct of the child and also the place such activities have in the dramatization of poems, fairy stories, short pantomimic plays, and in the organization of festivals. The subject-matter will be studied from the viewpoint of construction and the principles involved in the technique of production.

Physical Education 197–198—Clubcraft. I point each Session. Mr. C. F. Sмітн

M., 11

Open to students of other departments. This course is intended to give the practical training required by club leaders and supervisors. A study of the principles, aims, and programs of the better established club movements and organizations will be made. Actual

practical work will be done and opportunity provided for observation and study of Horace Mann clubs.

Education 389-390-Practicum in Hygiene and Physical Educa-§ 106 tion. 3 points each Session. Professors Wood and WILLIAMS

Hours to be arranged before registration

This course will deal with special problems in physical education and hygiene. Training will be given in methods of investigation and a report will be required for each student.

Kindergarten 109-110-Experimental Playground, I point each Session. Miss Rankin

S., 10

For description, see School of Education Announcement

Education 181—School and Community Festivals

See § 41

Scouting and Scoutcraft—See School of Education Announcement

Other Courses in Hygiene

See under Hygiene (§ 47) and Biology (§ 36)

Special and Extension Courses in Physical Education Announcement of special and extension courses in Physical Education § 107 will be made in the Announcement of Extension Teaching, which may be

obtained from the Secretary of Columbia University.

Summer Session Courses in Physical Education, 1919 Physical Education sA2—Graded Gymnastics, Athletics, Games, and Swimming for Men. 2 points

Physical Education s1—Hygienic Gymnastics. I point.*

Physical Education s6—Applied Anatomy of the Head and Viscera. 2 points. Miss Reeson

Physical Education s9—Calisthenics and Gymnastics. 2 points.

Mr. FETTE

Physical Education s10a—Gymnastics for Women. Miss Weston

Physical Education s10b—Calisthenic and Gymnastic Drills. I

point.* Mr. Mason
Physical Education s11—Folk and National Dances, Elementary. I point.* Miss Frost

Physical Education s12—Folk and National Dances, Intermediate.

I point.* Miss Frost

Physical Education s13—Folk and National Dances, Advanced and Classical Technique. I point.* Miss WESTON

Physical Education s14a—Swimming for Women. I point.* Mr. HOLM

Physical Education s14b—Swimming for Men. I point.* Peterson

Physical Education s15—Gymnastic Marching. I point.*

Mason Physical Education s16a—Athletics for Women (Track and Field

Events). I point. Mr. WARDLAW Physical Education s16b-Athletics for Women (Practice of

Games). I point.* Mr. WARDLAW

Physical Education s16c—Athletics for Women (Coaching of Games). I point.* Mr. WARDLAW

^{*} Credited only when taken in connection with any other one-point course in Physical Education.

Physical Education s17—Demonstration in Club Work and Playground. I point. Miss Gross and others Physical Education s56—Physiology of Exercise. 2 points. Mr. § 107

Physical Education s57—Normal Diagnosis. 2 points. Dr. Keyes Physical Education s60c—Coaching of Baseball. I point.* Mr. WARDLAW

Physical Education s60d—Coaching of Basketball. I point.* Mr.

WARDLAW

Physical Education s63—Dances Suitable for Boys. 1 point.* Miss Frost

Physical Education s65—Kinesiology. 2 points. Mr. Mason

Physical Education s66—Corrective Gymnastics. 2 points. Miss COLEMAN and assistant

Physical Education s71—Advanced Dancing. 2 points. Miss

COLBY

Physical Education s72—Playground Games. 2 points. Miss

Physical Education s77-The Dramatic Game. I point.* Miss

COLBY

Physical Education 154—Community Service and Recreation. 2 points. Miss Gross

Physical Education sZ-Social Dancing for Men and Women.

No credit. Miss Weston and assistants Education s101A—Dramatic Arts, Plays, Games, and Dances of

Early Childhood. 2 points.

Education s239A—The Dramatic Arts in Education. 1 point. Mrs.

McLean

Hygiene 172—Personal Hygiene. 2 points. Miss REESOR

Education s185—Fundamentals of Playground and Recreation Work. 2 points. Mr. FETTE

Education s190—Teaching of Physical Education. 2 points. Miss

Colby, Miss Weston, and Mr. Wardlaw
Education s193—Dramatic Expression in Physical Education.
2 points. Madame Alberti and Miss Colby

Education s195C-Principles and Practices of Scouting and

Scoutcraft. 2 points. Dr. Fretwell and others
Education s195D—Scout Executives' Course. 2 points. Dr. Fret-WELL and others

Public Lectures-Special Problems in Physical Education. No credit. Professor Williams, Mr. Coop, Miss Colby, and Miss Reesor

^{*} Credited only when taken in connection with any other one-point course in Physical Education.

PRACTICAL SCIENCE

Professor Broadhurst, adviser, with the co-operation of Professors § 108

BIGELOW, WOOD, and ROSE.

The major in Practical Science is open to Juniors and Seniors who in their previous work have completed general courses in science (biology, chemistry, and physics recommended), and who wish to prepare (a) for technical work in some line of science applied to practical arts, or (b) for teaching practical science in schools which include practical arts. The chief opportunities for specialization are household biology, hygiene and bacteriology, household chemistry and physics, and nutrition.

Required program of studies for the degree of Bachelor of Science:

GENERAL COURSES (see § 14): English A and B, 6 or more points in modern language, History A or B, Hygiene A, 8 points in Science (§ 14), Physical Training A and B, and other general courses (see § 14), to make a total of 45 points. At least 36 points of general courses should be completed in the Freshman and Sophomore years.

TECHNICAL COURSES: At least 45 points to be elected with the approval of the adviser. The following are recommended: Biology 3, 4, 57, Chemistry 1-2, 31, 51, Nutrition 71, Physics 1, 2, Hygiene 75 or 76, and other courses according to specialization in: (a) applied biology, (b) applied chemistry and physics, (c) hygiene (including public health), (d) nutrition. ELECTIVES: To complete 124 points.

Any courses announced under Biology, Chemistry, Geography, Hygiene, Nutrition, or Physics, may be taken in the technical or elective groups.

Students who expect to teach any phase of practical science in schools which emphasize practical arts should in the third and fourth years elect

Education A, 2, and B (total 12 points).

The rule which permits specially qualified Seniors who are registered under the Faculties of Barnard and Columbia Colleges to become candidates for teachers' diplomas under the Faculty of Education has been modified to include Seniors in Practical Science under the Faculty of Practical Arts, and a diploma for teaching general practical science will be offered. In addition to completing the requirement of the major in Practical Science, including the courses needed by a teacher of general or introductory science, the candidate for the teachers' diploma must take two approved courses in science teaching and Education 281 and 283.

FELLOWSHIPS, SCHOLARSHIPS, AND GRANTS

Teachers College awards annually a number of fellowships, forty or more scholarships, and a number of grants for foreign research, all, except where special announcement is made to the contrary, open to men and women.

Fellowships and Research Scholarships

A special Fellowship Fund, of not less than four thousand dollars, is assigned annually at the discretion of the Faculties to Fellows and Research Scholars, the normal assignment to a fellowship being five hundred, that to a research scholarship two hundred and fifty dollars. Any unexpended balance in the Fellowship Fund may be assigned to graduate students under the regulations that obtain for the award of graduate scholarships.

The competition is open to all applicants who are qualified to become candidates for the higher degrees and diplomas and who give evidence of special fitness to pursue courses of advanced study and original investigation in the various fields of education, including practical arts education. The term of each fellowship is one year, dating from July I, residence beginning at the opening of the academic year in September. In the event of a vacancy from any cause, the Faculties may fill such vacancy for the unexpired term in the same manner in which original appointments are made. A Fellow may be reappointed at the end of a year for reasons of weight. No Fellow may be appointed for more than two terms of one year each.

All Fellows are required to pursue their studies at this University during the term of their fellowship unless permission be granted them by the Faculties to study elsewhere. Every holder of a fellowship is expected to perform such duties as may be allotted to him in connection with his course of study, which must be one leading to a Master's or a Doctor's degree with a major in education. He will be expected some time during the academic year to give evidence of his progress by the preparation of an essay, the completion of a research, the delivery of a lecture, or by some similar method.

All stipends of Fellows are paid in ten equal installments, two installments being paid at the beginning of each half-year. The holder of a fellowship is required to pay all established fees. No Fellow is allowed to accept remunerative employment except by permission of the Dean, and the acceptance of any such employment, without such permission, shall operate to vacate the fellowship. In case of the failure of any Fellow to fulfil faithfully the obligations imposed upon him by the fellowship to which he has been appointed, he shall forfeit all privileges and emoluments conferred upon him by such fellowship, and the Faculties may at any time declare the fellowship vacant.

Applications for fellowships must be addressed to the Secretary of Teachers College, prior to March I preceding the academic year for which the appointment is desired, on blank forms which may be obtained from the Secretary.

The application must present evidence:

(a) Of an academic training of a liberal character, preferably with one or more testimonials from officers of educational institutions previously attended;

(b) Of decided fitness for undertaking original research in the field of education, such as a written or printed example or record of professional

work already performed; and

(c) Of upright character, such as a testimonial from a former instructor.

The Grace H. Dodge Fellowship (open to women only), of the annual value of five hundred dollars, established in 1914 in memory of Miss Dodge,

is awarded by the Faculties of Teachers College. The educational standard required of applicants is the same as for other fellowships, but the holder may have the privilege of pursuing either graduate or professional courses in any department of the College.

The Ellen H. Richards Memorial Fellowship in Household Arts will be available through Teachers College for the academic year 1919-1920. This fellowship, which will be awarded by the faculties under the general conditions governing the award of other fellowships and graduate scholarships within their control, has a stipend of four hundred dollars, representing the annual income of two hundred dollars of the Ellen H. Richards Memorial Fund, and two hundred dollars which will be assigned by Teachers College. In addition, the successful candidate will be allowed, for the year stated, free tuition in all courses conducted in Teachers College.

As soon as the awards are determined, a statement of the result is sent

to each applicant.

Graduate Scholarships

Eight or more graduate scholarships, each of the annual value of one hundred and fifty dollars, for the term of one year, are awarded on the same general conditions as the fellowships. They may be renewed for a second term of one year in case the holder gives evidence of superior ability. Teachers College Graduate Scholars are required to enrol themselves as candidates for a diploma and a higher degree with a major in education, and pursue a regular course of study leading thereto; and to perform such College duties, including proctoring in examinations, as may be assigned. Stipends of scholars are paid in equal semi-annual installments, on the

opening day of each half-year. Scholars are required to pay all established

fees.

Applications for scholarships should be addressed to the Secretary of Teachers College, prior to March I preceding the academic year for which the appointment is sought, on blank forms which may be had on application. An applicant for a fellowship who is unsuccessful may allow his original application to remain on file as an application for a scholarship.

As soon as the awards are determined, a statement of the result is sent

to each applicant.

Foreign Research Fund

Teachers College established in 1910 a Foreign Research Fund to aid competent students in investigating special phases of education in foreign countries. In general, this fund of one thousand dollars annually will be divided among several students so as to pay the extra cost of traveling and residence abroad.

Recipients of grants will be required to submit the result of their inves-

tigations in a form suitable for publication.

Applications for grants from this fund should be made on blanks to be obtained from the Secretary of Teachers College and to be returned to him for consideration by the Faculties on or before December 1 annually. Awards will be announced on or before December 15.

Recipients of grants should be prepared to start for Europe by the first

of February, following.

Undergraduate and Special Scholarships

The following undergraduate and special scholarships are awarded annually. Applications should be made in the same manner as for graduate scholarships, on blank forms provided by the Secretary of the College, to be returned for consideration prior to March I preceding the academic year for which the appointment is sought.

PRIZES 127

1. The "Tileston Scholarship" (undergraduate), of the annual value of one hundred and twenty-five dollars, founded in 1891 by Mrs. Peter M. Bryson.

2. The Fine Arts Alumni Scholarship, contributed by the alumni of the department of Fine Arts; awarded by the Dean on the recommenda-

tion of the head of the department concerned.

3. The "Pond Scholarship" (undergraduate), of the annual value of seventy-five dollars, founded and endowed in 1895 by Mrs. Frank Porter.

4. The "Charlotte Louisa Williams Scholarship" (open only to women), of the annual value of one hundred and fifty dollars, founded and endowed in 1897 by Mrs. Peter M. Bryson and Miss Grace H. Dodge.

5. The "Earl Scholarship" (open only to men), of the annual value of one

hundred and fifty dollars, founded and endowed in 1897.

6. The "Hoadley Scholarship," of the annual value of one hundred and

fifty dollars founded and endowed in 1899.

- 7. The "Runyan Scholarship," established in 1910, from the income of a fund given in memory of Mary Duncan Runyan, professor of Kindergarten from 1897 to 1905.
- 8. The "Livingston Scholarships," from a voluntary contribution, awarded by the Dean to foreign students, preferably missionary workers.
- 9. The "Delta Sigma Alumnæ Scholarship," of the annual value of seventy-five dollars, given since 1910 by the Delta Sigma Alumnæ Association; awarded annually by the Dean.
- 10. The "Caroline Scholarship," in Domestic Science, of the annual value of two hundred and fifty dollars, founded and endowed in 1903 by Miss Caroline Phelps Stokes.
- 11. Practical Arts Scholarships, from a fund of the annual value of one thousand dollars, awarded annually by the Faculty of Practical Arts.
- 12. The "Helen Hartley Jenkins Scholarship," of the annual value of two hundred and fifty dollars, given since 1910 by Mrs. Helen Hartley Jenkins; awarded annually by the Dean.
- 13. The "Army and Navy Scholarship," founded by the Society of the Daughters of the Cincinnati in 1906; awarded annually to the daughter of an officer of the regular army or navy of the United States, preferably of "Cincinnati" ancestry, upon the written nomination of the Society of the Daughters of the Cincinnati, attested by its seal and the signature of its President and Secretary. Provided that: In case this Society should fail to nominate a candidate on or before September 1, in any year, the Faculties shall have power to assign the scholarship to any properly qualified daughter of an officer of the regular army or navy of the United States. This Scholarship carries with it, besides free tuition in all or any of the courses offered by Teachers College, or by Columbia University in its behalf, an income of two hundred and eighty dollars.

14. The "Margaret Hoe Scholarship," of a value equal to the income of a fund of five thousand dollars, given by Mr. and Mrs. Richard M. Hoe;

awarded annually by the Dean.

PRIZES

Prize of the Colonial Dames

A prize of fifty dollars in gold and a silver medal are awarded annually by the Society of Colonial Dames to that student of Teachers College who presents the best essay on a topic connected with the colonial history of America. Papers must be presented to the head of the Department of History on or before April 20. The topics are publicly announced several months in advance.

Prize of the United Daughters of the Confederacy

A prize of one hundred dollars is awarded annually by the United Daughters of the Confederacy to that student of Teachers College who presents the best essay on a topic connected with the activity of the South before or during the war between the States. Papers must be presented to the head of the Department of History on or before April 20. The topics are announced several months in advance.

Caroline Phelps Stokes Prize

A prize of forty dollars, to be known as the Caroline Phelps Stokes Prize, is awarded annually to that student who, having been regularly enrolled in Columbia College, or Barnard College, or Teachers College as a candidate for an academic degree for not less than one academic year, shall be deemed to have written the best essay upon the Rights of Man, as the committee of selection shall determine.

COLLEGE LOAN FUNDS

Ruth Loan Fund

A fund known as the Ruth Loan Fund was established in 1896, to enable students in the later years of their courses to supplement means already at their command. Its advantages are usually open only to students who are already in residence. The amount loaned to any student in a single year averages seventy-five dollars and is never more than one hundred dollars. The student is required to give a note for the amount borrowed, payable at some definite time with interest at two per cent.

Applications should be made personally or in writing to the Controller

of Teachers College.

General Loan Fund

A General Loan Fund, established by the Trustees of the College in 1897, and augmented by the graduation gifts of the classes of 1906, 1908, 1910, 1911, 1912, 1913, 1914, 1916, and 1918, is administered in the same way as the Ruth Loan Fund.

Applications should be made personally or in writing to the Controller

of Teachers College.

The Mary Schenck Woolman Loan Fund

This loan fund was established in 1912 by the former students and colleagues of Mrs. Woolman, in recognition of her long service in Teachers College. It is open to students in residence in the School of Practical Arts, who must have temporary financial help and who intend subsequently to enter the Department of Household Arts Education, and to students in residence in the Department of Household Arts Education. The student is required to give a note for the amount, payable at some definite time, with interest at two per cent.

Applications should be made to the Controller of Teachers College.

Nursing and Health Loan Fund

The Nursing and Health Branch of the Teachers College Alumni Association has established a loan fund to be used for regularly matriculated students in the second year of the Nursing and Health course. The regulations specify that not more than two hundred dollars be loaned to any one student, that not more than four hundred dollars be loaned in any one year, and that the loan be payable within a period of two years after leaving Teachers College, with interest at two per cent.

This fund was supplemented in 1914 by a gift from the Nurses' Club of Teachers College, the awards from which are made to senior students on the basis of promise of professional ability.

Applications should be made to the Controller of Teachers College.

BUILDINGS AND EQUIPMENT

Teachers College is situated on Morningside Heights, north of Central Park and between Riverside and Morningside Parks, occupying the block bounded by 120th Street, Amsterdam Avenue, 121st Street and Broadway, opposite the central campus of the University. The site commands views of both the Hudson and the Harlem Rivers. St. Luke's Hospital, the Cathedral of St. John the Divine, the Art School of the National Academy of Design, the Institute of Musical Art, and the Union Theological Seminary are in the immediate vicinity. The College is accessible from all parts of the city by the Broadway Subway to the Columbia University Station at Broadway and 116th Street; by the Sixth or Ninth Avenue elevated railroad lines to 116th or 125th Street; or by the surface lines on Amsterdam Avenue and on Broadway. The main entrance of the College is numbered 525 West 120th Street. The cable address of the College is "Teacol."

The buildings—five in number—are connected by corridors so that they form practically one building. The Main Building, erected in 1894, fronting on 120th Street, is devoted to general business offices (main floor); the laboratories, offices, conference, lecture, and class-rooms of various departments of instruction (second and fourth floors); the Bryson Library with its connected rooms for reading and study (second and third floors); and science laboratories on the fourth floor. In a large room on the third floor is installed a laboratory of educational statistics, for the use of advanced students in education. The laboratory is fully equipped with modern calculating machines and statistical tables.

The Milbank Memorial Building, the gift of Mr. Joseph Milbank as a memorial to his parents, opened in September, 1897, contains the Memorial Chapel (first floor), and offices, laboratories, conference, lecture, and classrooms for a number of departments on the second, third, and fourth floors.

The Macy Manual Arts Building, given in 1896 by Mrs. Josiah Macy as a memorial to her husband, is equipped for the Departments of Fine Arts and Industrial Arts and contains a number of offices and large lecture rooms.

The Frederick Ferris Thompson Memorial Building, the gift of Mrs. Frederick F. Thompson, opened in 1904, adjoins the main building on the west, and contains, in addition to the offices, conference, laboratory, and lecture rooms of the Department of Physical Education, a large gymnasium and smaller exercise rooms, hand-ball courts, bowling alleys, shower-baths and a swimming-pool for the women of the College and the pupils of the Horace Mann School.

The Household Arts Building, a gift of Miss Grace H. Dodge in memory of her mother, opened in 1909, adjoins the main building on the northeast and extends 150 feet along 121st Street, providing approximately an acre of floor space. The basement contains two laundry laboratories, and a laboratory for testing and experimental work. On the first floor are offices, lecture rooms, and the departmental library. The second floor has three large laboratories for instruction in Foods and Cookery, an experimental cooking laboratory, one dining-room, and necessary service rooms. The third floor is devoted to Textiles and Clothing, and includes four large studios for garment-making, dressmaking, and allied courses. The laboratories of Household Chemistry, Physiological Chemistry and Nutrition are on the fourth floor. The fifth floor has studios for Interior Deceration,

Household Design, and Costume Design and Illustration, a Nutrition research laboratory, and a laboratory for Nursing and Health. A flat-roof area of 2,000 square feet, accessible by elevator, is used for open-air classes of the Horace Mann Elementary School.

Adjoining the Thompson Building on the west is that of the Horace Mann School, the gift of Mr. and Mrs. V. Everit Macy, completed in 1901, and accommodating one thousand elementary and high-school pupils. It is a modern school building of the most advanced type, with an auditorium, a library, a gymnasium, a lunch room, offices for the departments of administration and instruction, and about forty conference, class, and recitation rooms. The exercise field is at 246th Street.

The Horace Mann School for Boys, a gift of the trustees and friends of the College, was opened in the fall of 1914. It is situated at 246th Street, west of Broadway, upon a plot originally acquired as an exercise field. The building is of the best construction, and fully equipped. The large field affords ample opportunity for the necessary sports and exercises of such a school throughout the academic year. The principal's residence, constructed at the same time, is near the school.

The building given by Mr. and Mrs. James Speyer for the Experimental School of the College, completed in 1902, is on Lawrence Street near Amsterdam Avenue, a five minutes' walk north of the College. It contains offices, classrooms, a gymnasium, and laboratories for the accommodation of a junior high school.

The Lincoln School, the new experimental school of Teachers College, was opened in the fall of 1917. It occupies the main building at 646 Park Avenue, and an annex at 56 East 67th Street. The main building is a modern fireproof structure, seven stories in height, which has been extensively remodeled to suit the purposes of The Lincoln School. The annex is connected with it by means of passageways, so that there is ready communication between the two buildings. Adequate playgrounds are provided near the school.

Whittier Hall, a ten-story fireproof residence for women students, erected by a group of friends of the College in 1901, is now College property, and is fully described on page 135.

These special facilities of the College in buildings and equipment, representing an expenditure of more than four million dollars, are supplemented by the facilities of other parts of the University, and by the many intellectual, artistic, historic, economic, social and religious opportunities of the city. Students are allowed special privileges by many institutions such as the Metropolitan Museum of Art, the National Academy of Design, the Art Students' League, the New York Public Libraries, the American Museum of Natural History, the Botanical Cardens, the Zoological Park, and the Aquarium.

TEACHERS COLLEGE SCHOOLS

In order to supplement its instruction in educational aims, curricula and methods, and to cultivate professional skill in meeting actual problems, Teachers College has developed as an integral part of its work the Horace Mann School and the Horace Mann School for Boys for observation and experiment, and the Speyer School for practice and experiment. These schools have a total enrolment of more than two thousand pupils. In the fall of 1917 Teachers College added to its resources a third experimental school, known as The Lincoln School, which is conducted in co-operation with the General Education Board. Opportunity for observation in each of these schools and for discussion of the various problems which they present is open to all professional students in the College.

Horace Mann Schools

The main building of the Horace Mann School is adjacent to Teachers College. It includes the kindergarten, an elementary school of six years for boys and girls, and a high school of six years for girls. Two open-air school-rooms are also maintained on the roof of the Household Arts Building, thus affording opportunity for experiments in this new field of teaching. The Horace Mann School for Boys is a country day school located in its new building near Van Cortlandt Park. The girls' high school offers programs of study both in preparation for college and for general education. The program of the boys' school primarily serves the needs of those who intend to enter college.

The Horace Mann Schools are constantly experimenting with different methods of instruction and with new types of curricula, and while meeting the formal requirements for college entrance, are thoroughly progressive.

Speyer School

The Speyer School has been reorganized as an academic junior high school under the Board of Education of New York City in co-operation with Teachers College. It will continue to be a school for experimentation, the problems now undertaken relating to the organization, the course of study, and the methods of teaching in the junior high school.

The intention is to make Speyer School and Public School 43, to which it is annexed, the clearing house for all modifications of normal practice that are likely to improve the training of boys and girls for good citizenship. The two schools contain all grades from the kindergarten through the ninth.

A more detailed description of the Horace Mann and Speyer Schools and their work is given in several publications for sale by the College Bureau of Publications. For a list of the instructors in these schools, see pp. 16–20.

The Lincoln School

In The Lincoln School an attempt is being made to organize a curriculum which emphasizes the interests and activities of actual life—social, civic, industrial, physical, intellectual, and ethical—thus endeavoring to lead pupils to an appreciation of school work as organically connected with the interests of the home and community. Particular attention is directed to improvement of the ways and means of instruction and to the development of courses of instruction which are based upon the varied interests and activities of society. No subject-matter is included in the courses of study merely because of traditional requirements, or merely for formal disciplinary ends, since it is desired to experiment with the theory that the best disciplines are secured through the use of materials which are in themselves related to common thought, use, and ideals.

The Lincoln School began its work on October 1, 1917. It now has an enrolment of 184 pupils, including boys and girls, distributed throughout the first ten grades. The classes are relatively small since it is desired that none shall exceed 20 pupils in order that the attention of teachers may be directed primarily to constructive work rather than to the heavier burdens of teaching which are involved in caring for larger numbers of pupils. Constructive experimentation is being carried out in the high school in the sciences, mathematics, history and civics, English, modern languages, and industrial arts. In the elementary school similar experiments are being conducted in the reorganization of instruction in the fundamental subjects of reading, history, writing, spelling, and arithmetic.

The school is organized upon the 6-3-3 plan. The teachers of special subjects in the junior and senior high school assist in the organization of the corresponding work in the grades.

For list of instructors, see p. 21.

LIBRARIES

The Bryson Library of Teachers College

This library was founded by the late Mrs. Peter M. Bryson as a memorial to her husband. Including the two branch libraries in the Horace Mann and Practical Arts Schools, it contains 66,050 especially selected volumes, comprising works in English, French, German, and Latin on the history and philosophy of education, the theory and practice of teaching, school organization and administration, psychology, child study, sociology, fine arts, and physical, vocational, religious, and rural education; several thousand reports of American and foreign state and city educational systems and special schools; a collection of 8,000 American text-books for all school grades; a collection of the text-books on all subjects taught in the schools of France and Germany, and many from other countries; and a collection of 7,000 volumes representing the historical development of books for children.

Although the main purpose of the library is to afford to students of education opportunities for research and advanced professional study, it also contains a selected list of general works on philosophy, history, music, literature, and science.

The Avery collection, presented and endowed by Mr. and Mrs. Samuel P. Avery as a memorial to their daughter, Ellen Walters Avery, consists of about 2,400 volumes on literature, hymnology, music bibliography, and natural history. Most of these books are illustrated. The books on nature-study together with those in the regular library form one of the best working collections on the subject in the country.

The library serves also as a reading-room, and has on file over 340 of the leading French, German, English, and American periodicals, those bearing upon education being best represented. The annual additions to the library number about 3,000 volumes.

In addition to the collections described above, the Bryson Library has been since 1903 the repository from the main Library of the University of its entire collection of books bearing specifically upon the subject of education, a total of about 15,000 volumes.

The Reading Room of the School of Practical Arts is in the Household Arts Building. It contains a well-chosen technical library of over 8,000 bound volumes, on the subjects of industrial arts, including drawing, design, art industries; household arts, including nutrition, dietetics, practical cookery, textile economics, history of costume, sewing, dressmaing and millinery, house design and decoration, household and institutional administration, hospital administration and nursing; social science; and sanitation and health.

The Library of Columbia University

The General Library of the University contains about 712,000 volumes, exclusive of unbound pamphlets and doctoral dissertations. Students of Teachers College have the usual privileges of this Library, open each week day during the academic year from 8.30 a.m. to 10 p.m.

Connected with the stacks in which are stored the books relating especially to the departments of Philosophy, Literature and Philology, the Sociological and Economic Sciences, Public Law, and History, are special study rooms open to authorized readers. This arrangement is intended to give to advanced students and investigators in these fields the fullest opportunity to carry on their work by the use of quiet rooms in the immediate vicinity of the complete literature of their subjects. For further information consult the *Readers' Manual* and *Library Rules*.

The various departments of instruction have also special libraries in connection with their lecture-rooms and laboratories. The Avery Architectural Library, the Law Library, the Ella Weed Library of Barnard College, the Bryson Library of Teachers College, and the libraries of the College of Physicians and Surgeons and the College of Pharmacy, are all available to students of the University.

The Plimpton Library

Graduate students in Teachers College may, under reasonable restrictions, have access to the private library of George A. Plimpton, LL.D., for the purpose of investigating the history of education by means of early textbooks. Dr. Plimpton has the largest collection of early printed arithmetics that has ever been brought together, and a larger number of medieval manuscripts on the subject than can be found in any other private library. His collection is also very rich in other early mathematical works and treatises on education, and it is quite unequaled in early geographies, readers, and Latin, Greek, and English grammars and dictionaries, as well as in books on rhetoric, logic, reading, spelling, and penmanship. The library has already been of great assistance to a number of graduate students in education, and it is proposed by Dr. Plimpton to make it even more serviceable. A catalogue of its rare arithmetics has been prepared under the direction of Professor Smith. From time to time Dr. Plimpton has loaned certain of his rare works for purposes of exhibit.

BUREAU OF EDUCATIONAL SERVICE

MARION REX TRABUE, Ph.D., Assistant Professor of Education, Director. ISABELLE L. PRATT, Recorder

A Bureau of Educational Service has been organized at Teachers College for the purpose of serving school authorities, the alumni of Teachers College, and others interested in education.

To the alumni of Teachers College the Bureau will be glad to offer any assistance for their professional advancement. It is urged that each former student keep the Bureau informed of his changes in address and in educational work in order that the College may always have on hand the latest information about each of its alumni. The Bureau will also be glad to learn of progress in educational experimentation and measurement being made by former students; so far as circumstances permit the Bureau will serve as a central agency for information concerning educational matters. The Bureau will also assist local groups of alumni to form Teachers College Clubs and to promote other local alumni interests.

The work of the former Appointment Committee is now incorporated in the Bureau which will furnish to school and institutional authorities who are seeking to fill vacancies, information concerning properly qualified candidates selected from present or former students. Recommendations are made and information furnished only upon the request of the authorities concerned. The Bureau seeks to serve, without charge to either, the interests of both the students and the institutions that may be in need of such aid.

Any student now or formerly registered in the University is eligible to enrolment with the Bureau. Attention is called to the division of work between the Columbia University Appointment Committee and the Teachers College Bureau of Educational Service. The Columbia Appointment Committee (Mr. Levering Tyson, Secretary) accepts registration and makes recommendation for teaching positions in academic subjects in colleges or universities; also for positions in business, law, etc. The Bureau of

Educational Service of Teachers College accepts registration and makes recommendation for college and university positions in the teaching of education and in the field of practical arts; and for administrative, supervisory, and teaching positions in normal, industrial, secondary, and elementary schools and kindergartens; also in hospitals and similar institutions; that is to say, for any positions specific preparation for which is made in Teachers College.

Success in each of the specialized lines of educational work requires, in addition to thorough professional preparation, a high degree of native ability, personality, and adaptability. For men and women who combine these qualities in high degree with successful experience the demand exceeds the supply. The general distribution of demands may be inferred from the following table giving totals of positions filled by students as they have left the College for the past eighteen years (1900-1918) and the same distribution for the past year (1917-1918):

Summary of Appointment Reports, 1900 to 1918

I	917-18	1900-18
College and university positions	182	1,528
Normal school positions, including directors of		
training, instructors, and critics	109	1,081
Public school administration and supervision 1	112	821
Secondary school teaching positions	190	2,726
Elementary school teaching positions	64	1,086
Kindergarten teaching positions	9	458
Household Arts, supervisors and teachers 2	319	2,630
Fine Arts, supervisors and teachers	36	470
Industrial Arts, supervisors and teachers	27	610
Physical Education, supervisors and teachers	27	281
Music, supervisors and teachers	8	108
Nursing and Health	27	357
Miscellaneous	214	1,099
	1,324	13,255
Less names counted twice in the above tabulation	308	2,083
	1,016	11,172

The Bureau of Educational Service renders assistance, wherever possible, to students who are obliged to defray part of their expenses while in college, by placing them in touch with such opportunities for part-time work as arise.

Communications should be addressed to the Director or to the Recorder of the Bureau of Educational Service, Teachers College.

LIVING ARRANGEMENTS

Residence Halls for Men

There are three residence halls for men on the University grounds-Hartley, Livingston, and Furnald Halls-with accommodations for approximately 820 students.

3 Includes administrative positions in hospital work.

¹ Includes superintendents and assistant superintendents of schools, principals and assistant principals of secondary, elementary, and industrial schools, and kindergartens.
² Includes supervisors and teachers of Domestic Science and Art, and appointments in Household Administration.

Detailed information concerning these halls, the facilities and cost, may be obtained from the office of the Superintendent of Buildings and Grounds, Columbia University.

The University Commons, in University Hall, provides board at reason-

able rates and also maintains a lunch room.

Whittier Hall

A hall of residence for the women students of Columbia University, known as Whittier Hall, erected in 1901 at an expense of over one million

dollars, was presented to Teachers College in 1908.

The Directors of the Hall and their assistants are all women familiar with the needs of college students. The general administration of the house is in the hands of the House Director. The Director of the Dining-room is a trained dietitian of broad experience. The Social Director of Teachers College lives in the Hall, and she and the Assistant Social Director, as housemothers, have supervision of the house life, the younger students, especially, being directly responsible to them. The Resident Nurse and her assistant, women of training and experience, have general charge of the physical welfare of the household, working in consultation with the Social Director, and under the advice of the College Physician.

The Hall adjoins Teachers College on the east. It is a fireproof building, ten stories in height, especially designed and constructed for students' use. Every room is outside, and the arrangement is such that rooms may be rented singly or in suites of two or three. There is also a limited number of suites consisting of two rooms and private bath. The building is heated by steam and lighted by electricity. There is complete telephone and elevator service, and a system of shower, needle, and tub baths on each floor. The public parlors and reception rooms are on the main floor. The diningrooms and restaurants are on the ninth floor and command extensive views

over the city and the North and East rivers.

The rates for single furnished rooms in Whittier Hall are from \$340 upward, according to location. The rate for the majority of rooms is \$380. These rates include room rental for the academic year, holidays included, beginning before dinner on the day preceding the first day of registration in September and closing after breakfast on the day following commencement in June (see Calendar at the end of this Announcement) and also table board and plain laundry for one person during this period, except in the Christmas and Easter holidays. Payment is required in installments, viz., three-eighths on entrance, one-fourth on the first day of December, one-fourth on the first of February, and one-eighth on the first of April. No deduction is made for failure to occupy a room at the beginning or the end of the year, or for occasional absences, but in case a person is excluded from the Hall, or is obliged to leave on account of illness, rental will be charged only for the period of occupancy, at monthly rates.

Arrangements may be made, if desired, for board and laundry during the

several vacations.

A deposit of \$10 is required of each applicant, and is retained until the end of the academic year, when it is returned less the amount assessed for

unusual damage to room or furniture.

A descriptive circular with diagrams will be sent to any address on application to the House Director of Whittier Hall, 1230 Amsterdam Avenue, New York City, or to the Controller of Teachers College.

Residence Outside the Halls

Information and advice concerning desirable rooms and boarding places for both men and women may be obtained from the Assistant Social Director of Teachers College. Experience proves that personal inspection

is necessary to suit individual tastes, and students are therefore advised not to complete arrangements until they arrive in New York City. If necessary, temporary arrangements can easily be made at that time until final choice has been determined.

Many students effect a material reduction in the cost of living by uniting in small groups for light housekeeping. Unfurnished apartments of from five to seven rooms in houses without elevators may be rented from \$55 a month upwards, and apartments of four rooms from \$45 a month up. Apartments furnished for housekeeping are occasionally available at proportionately higher rates. Kitchen privileges are frequently given with rooms offered for rent in the vicinity. Furniture for housekeeping purposes can be purchased at favorable rates, and older students are assisted to form themselves into groups and reduce their expenses in this way. All women students under twenty-five years of age who are not living at home are required to live in Whittier Hall or obtain permission of the Social Director for living elsewhere. Such students will not be allowed to complete their registration until their proposed living arrangements have been approved by the Social Director, whose signature must be obtained. In general, the younger students are not expected to take rooms in places where no reception room is provided for their guests.

Students are warned that it is unsafe to engage rooms offered by unauthorized persons, and are urged to obtain the approval of the Assistant Social Director of the College in every instance.

The Women's Faculty Club of Columbia University

The Women's Faculty Club of the University has rented three apartments in the Lowell, one to serve the social purposes of the Club, the other two to furnish rooms and meals to a limited number of members. The Club admits graduate women students to associate membership on payment of \$5.00, which is half the regular annual dues. Membership entitles the graduate student to all the social privileges of the Club—use of tea-rooms, reading-room, etc—and gives her the privilege of living in the Club if a room is available. Voting privileges, however, are not extended to associate members. Rates for rooms vary from \$5.00 per week to \$7.00. Meals are \$7.50 per week. Graduate students who desire to join the Club will be assured of a cordial welcome from the faculty members. Application for rooms should be made well in advance to the Chairman of the House Committee.

STUDENT WELFARE

A Welfare Committee of seven faculty members, appointed by the Dean from the various departments of the College, has as its business the consideration of problems of student welfare other than those dealt with by the Committee on Instruction. The Social Director of the College and her assistants, working in close conjunction with this committee and with the College physicians, have charge especially of the women students in all matters outside their academic work, and the direction of their social life and welfare. One of these assistants maintains the directory of rooms and board for women living outside the residence hall; another, known as the College Visitor, keeps in friendly touch with this group, and advises them in times of difficulty; and one bears a similar relation to students resident in the Hall, the younger students there being directly under her care. In cases of emergency, students are expected to consult one of these officers immediately.

Medical Attendance

The Teachers College physician has direct supervision of all matters affecting the health of the Teachers College student body. All cases of

communicable disease in homes of students are required to be reported promptly to him. The Teachers College physician and the assistant physicians, one of whom is a woman, give professional advice without charge to students who consult them in their offices in the Thompson Building.

STUDENTS' EXPENSES

Statement Based on Students' Estimates of Average Total for the Academic Year, including Winter and Spring Sessions

	Low	Liberal
University fee	\$10	\$10
Tuition fee (ordinarily 30 to 36 points at \$6)	180	216
Books and stationery	20 `	40
Incidentals	60	150
Room (38 weeks)	133	228
Board (35 weeks, vacations not included)	210	280
Laundry	38	57
Total	\$651	´\$981

See also rates for Whittier Hall on page 135.

Students of Textiles and Clothing should add to this estimate an expenditure for materials, varying according to the courses taken, as stated in the description of each course. A fair average total is \$20 yearly.

STUDENT ORGANIZATIONS

Student self-government is maintained in Teachers College through the Students' Executive Council, made up of thirteen members, four from the School of Education, six from the School of Practical Arts, including the president of the Whittier Hall Student Government Association which is responsible to the Council, and three from the Faculty. This Council meets regularly for the consideration and control of matters affecting the entire student body.

The professional and social life of both Schools of Teachers College is further promoted by numerous student organizations, such as the Administration, Secondary, Elementary, and Kindergarten Clubs; the Household Arts, Vocational, Rural, Advisers', and Women's Discussion Clubs; the Music, Nurses', and Physical Education Clubs; the Athletic and Dramatic Associations; the Red Cross Committee; the Young Men's and Young Women's Christian Associations, the Catholic Club, and the Jewish Forum. The religious groups are affiliated in the Federation of Religious Organizations.

Club rooms for the women students of the College were established in September, 1917, under the name of The Women's Club of Teachers. College. An entire apartment was secured near the College, and a resident secretary placed in charge. Tea is served every afternoon to members and their friends, and the club serves in many ways as a neighborhood center for the students living outside the residence halls.

There are, furthermore, several other student organizations, such as the British Empire, Cosmopolitan, Christian Science, Women's Graduate, and Chinese Students' Clubs, belonging to the University as a whole, and therefore open to students in Teachers College. Another organization called The Columbia Dames brings together the wives and mothers of university students.

The advantages of Earl Hall, the building devoted to the religious, philanthropic, and social activities of the University, and the services of

its Secretary, are also available for students of Teachers College. Students Hall, recently erected on the Barnard College Campus, is open as a social center to all women of the University.

TEACHERS COLLEGE RELIGIOUS SERVICES

Teachers College as a non-sectarian institution welcomes all creeds to its classes, and invites every student to join in its religious services, held at noon in Milbank Memorial Chapel. The weekly program, arranged by a joint committee of Faculty members and students appointed by the Dean, consists of two regular Chapel services Wednesday and Friday noons, at which speakers both from the Faculty and from without the College give brief talks. The music with special anthems by the College choir is in charge of the Music Department.

On Thursday occur the weekly meetings of the various religious organizations. These offer opportunity to hear prominent leaders of religious

thought and to take part in the discussion of special topics.

Teachers College students are welcomed at the services held in St. Paul's Chapel every week day during the academic year, except on Wednesdays and Saturdays, at noon. The Sunday service is held at four o'clock. Earl Hall, the home of the religious, philanthropic, and social organizations and interests of the University, is open daily to all students.

LECTURES AND RECITALS

In the course of the college year many public lectures and recitals, open without charge to students and their friends, are given before the student public, under the general auspices of the University, the College, or of the various student organizations.

TEACHERS COLLEGE PUBLICATIONS

Committee on Publications: Dean Russell (Editor), Professors Upton (Chairman and Associate Editor), LODGE, THORNDIKE, McFARLANE, and BAGLEY.

A descriptive price list of all publications may be obtained by addressing

the Bureau of Publications, Teachers College.

The Teachers College Record

The Teachers College Record is a serial publication issued by Teachers College, under the editorship of the Dean, for the purpose of presenting to the alumni and other students of education and to the public generally the views of the history and principles of education, of educational administration, and of the theory and practice of teaching as advocated and followed by Teachers College and its schools of observation and practice.

Up to January, 1915, each number of the RECORD treated a specific problem in the work of the kindergarten, elementary school, high school, or some department of college work. The topics presented have included the following: the history, organization and administration of Teachers College; the management of schools of observation and practice; the selection and arrangement of materials for curricula; outlines of courses of study in various subjects; the aims, methods, and results of instruction in the various school grades; syllabi of collegiate courses; and studies in the history and philosophy of education, school economy, and the theory and practice of teaching worked out in the College and its elementary and secondary schools.

Since January, 1915, the RECORD has been considerably enlarged so as to include in addition to monographs of the kind mentioned above numerous shorter articles covering each of the departments of educational specialization. There is also given news of the College, its departmental activities, and the alumni. The Household Arts Review has been incorporated.

There are five numbers each year: January, March, May, September, and November. Subscription is \$1.50 per year, 40 cents per number;

special discounts on orders for five or more copies.

Nineteen volumes (1900-1918) have been published. A complete list of contents may be obtained from the Bureau of Publications.

Columbia University Contributions to Education— **Teachers College Series**

This series, established in 1905, continues the educational issues of the Columbia University Contributions to Philosophy, Psychology, and Education, and presents the results of research by officers or advanced students of the College in the history and philosophy of education, in educational psychology, in kindergarten, elementary, and secondary education, in educational administration, and in related fields. Ninety-nine volumes have been issued in this series.

Teachers College Lectures on the Religious Life

Three volumes have been published in this series.

Technical Education Bulletins

A series of pamphlets dealing with educational and technical problems in the field of the School of Practical Arts.

Other Educational Books and Pamphlets

The Bureau of Publications has published many text-books, reprints, monographs, bibliographies, and syllabi of courses other than the above series. A complete catalogue will be sent upon request.

INDEX TO GRADUATE COURSES IN HOUSEHOLD ARTS AND PRACTICAL ARTS

For education courses not listed here, see index in the School of Education Announcement.

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HOUR SCHEDULE FOR AFTERNOON, EVENING, AND SATURDAY CLASSES IN PRACTICAL ARTS

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A full list of names of graduates who received 1917–18 Columbia University degrees through Teachers College and Teachers College diplomas is included in the "Register of Teachers College Students, 1918–19," which will be sent on application to the Secretary of the College.

Summary of Degrees, Diplomas, and Certificates Conferred 1917–18

Ι

1717 10	
Degrees: Doctor of Philosophy Master of Arts Master of Science Bachelor of Science	. 19 . 306 . 4 . 345
Teachers College Diplomas:	
Awarded in connection with the Doctor of Philosophy degree	. 7 . 187 . 226 . 14
Total degrees and diplomas awarded	. 1,108
Distribution of the Professional Diplomas:	
Instructor in Education Teacher of Education Superintendent of Schools Principal of High Schools Supervisor in Normal Schools Teacher in Elementary Schools Supervisor of Primary Schools Supervisor of Primary Schools Teacher in Primary Schools Teacher in Primary Schools Teacher in Kindergartens Supervisor of Kindergartens Adviser to Women and Girls Psychologist Supervisor of Religious Education Teacher of Religious Education Teacher of Religious Education Supervisor of Special Classes Supervisor of Special Classes Supervisor of Rural Education Teacher of Rural Education Teacher of Fine Arts Supervisor of Fine Arts Supervisor of French Teacher of French Teacher of Geography Teacher of Geography Teacher of History Supervisor of History Supervisor of Household Arts Supervisor of Household Arts Dietitian House Director Teacher of Industrial Arts Supervisor of Industrial Arts	. 7 . 9 . 10 . 15 . 16 . 16 . 18 . 18 . 18 . 17 . 17 . 2 . 11 . 13 . 25 . 17 . 17 . 17 . 18 . 118 . 14 . 13 . 25 . 118 . 148 . 149 . 19 . 118 . 148 . 149 . 19 . 19 . 19 . 19 . 19 . 19 . 19 . 1
Supervisor of Mathematics	. 9
Teacher of Latin Teacher of Mathematics Supervisor of Mathematics Teacher of School Music Teacher of School Music Supervisor of School Music Teacher of Hygiene and Physical Education Supervisor of Hygiene and Education Supervisor of Play and Playgrounds Teacher of Scouting Teacher of Scouting Teacher of Physical Science Supervisor of Public Health Nursing Public Health Nurse Superintendent of Nurses and Principal of Training Schools	. 2 . 3 . 24 . 3 . 1 . 2 . 1 . 1
	*420

* Includes duplicate count, 2 students candidates for more than one diploma.

STUDENTS, 1918-19

A full list of students registered in 1918–19 will be sent on application to the Secretary of Teachers College.

,, ,	active contege.	
I.	Graduate students:	
	Candidates for the degrees Doctor of Philosophy, Master of Arts, Master of Science, and the Teachers College diploma, major in:	
	Administration of Education	6
	Educational Sociology	2
	Elementary Education	I
	History of Education	5
		7
		34
	Religious Education	16
	Rural Education	7
	Secondary Education	27
	Vocational Education	9
	English	50
		I
	History	30
	Latin	4
	Mathematics	34
		61
	Household Arts	76
	Fine Arts	23
	Industrial Arts	[2
	Music	Ĭ
	Nursing and Health	6
		30
		-
		00
II.	Undergraduate students:	
	Candidates for the degree of Bachelor of Science and the Teachers College	
	Diploma:	
	Unclassified in Education	94
		51
	Sophomores in Practical Arts	32
	Freshmen in Practical Arts	30
		84
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	Total matriculated students in Teachers College	
	Additional matriculated students both schools, Summer Session, 1918 . 1,4	
	Matriculated students from other parts of the University	81
	Total matriculated students, Teachers Conege, from July 1, 1918 4,1	. 4
	(In addition to the above there are I 228 students in the Horace	

(In addition to the above there are 1,228 students in the Horace Mann Schools, 625 extension students in the School of Practical Arts, and 1,995 non-matriculated students in the Summer Session of 1918.)

ACADEMIC CALENDAR

1919-1920

1919

July 7-Monday. Twentieth Summer Session begins.

Aug. I—Friday. Last day for filing applications for the Master's degree to be conferred in October.*

Aug. 15-Friday. Twentieth Summer Session ends.

Sept. 15-Monday. Entrance examinations begin.

Sept. 17—Wednesday. Registration (including the payment of fees) begins. Teachers College deficiency examinations.

Sept. 23—Tuesday. Registration ceases for undergraduate students previously matriculated.*

Sept. 24—Wednesday. Winter Session, 166th year, begins. Registration ceases for undergraduate students not previously matriculated.* Fellows and Scholars report to the office of the Dean of Teachers College.

Sept. 27—Saturday. Registration ceases for graduate students. The privilege of later registration may be granted, up to October 18, on payment of a fee of \$5.

Oct. I—Wednesday. Last day for filing applications for Bachelor's degree to be conferred in October.*

Last day for filing essay for the Master's degree to be conferred

in October.

Oct. 4—Saturday. Last day for changes in undergraduate programs.

Oct. 18—Saturday. Last day for receiving late applications for registration for full credit. Last day for making changes in programs of graduate students.

Nov. 4-Tuesday. Election day, holiday.

Nov. 26—Wednesday. Thanksgiving service in St. Paul's Chapel.

Nov. 27—Thursday, to

Nov. 29—Saturday,

inclusive. Thanksgiving holidays.

Dec. I—Monday. Last day for filing applications for the Master's degree to be conferred in February.*

Dec. 21—Sunday to

1920

Jan. 3-Saturday,

inclusive. Christmas holidays.

Jan. 15—Thursday. Mid-year entrance examinations begin.

Jan. 21—Wednesday. Mid-year examinations begin.

Jan. 31—Saturday. Registration for Spring Session (including the payment of fees) begins.

Feb. 2—Monday. Last day for filing applications for Bachelor's degree to be conferred in February.*

Feb. 3—Tuesday. Winter Session ends. Registration ceases for students entering Spring Session.*

Last day for filing essay for the Master's degree to be conferred in February.

^{*}The privilege of later applications or registration may be granted on payment of a fee of \$5.

Feb. 4—Wednesday. **Spring Session begins.** University service in St. Paul's Chapel. Fellows and Scholars report to the Dean of Teachers College.

Feb. 14—Saturday. Last day for making changes in undergraduate programs.

Feb. 20-Friday and

Feb. 21-Saturday. Teachers College Alumni Conferences.

Feb. 23—Monday. Washington's Birthday, holiday.

Feb. 28—Saturday. Last day for receiving late applications for registration for full credit. Last day for making changes in programs of graduate students. Teachers College deficiency examinations.

Mar. I—Monday. Last day for filing applications for Fellowships and Scholarships. Last day for filing applications for the Master's degree to be conferred in June.*

April I—Thursday. Last day for filing applications for examination for the degree of Doctor of Philosophy to be conferred in June.

April I—Thursday, to

April 5-Monday, inclusive. Easter holidays.

April 13—Tuesday. Last day for filing applications for Bachelor's degree to be conferred in June.*

April 26-Monday, to

May 1—Saturday, 12 M.

inclusive. Undergraduate students in the School of Practical Arts file choice of studies for the following year.

May 13—Thursday, to

May 15—Saturday,

inclusive. Preliminary examinations for candidacy for the degree of Doctor of Philosophy.

May 17—Monday. Final examinations begin.

May 19—Wednesday. Last day for filing essay for the Master's degree to be conferred in June.

May 30—Sunday. Baccalaureate Service.

May 31-Monday. Memorial Day, holiday.

June 2-Wednesday. Commencement Day.

June 9-Wednesday. Spring Session ends.

June 14-Monday. Entrance examinations begin.

July 6-Tuesday. Twenty-first Summer Session begins.

Aug. 2—Monday. Last day for filing applications for the Master's degree to be conferred in October.*

Aug. 13-Friday. Twenty-first Summer Session ends.

Sept. 13-Monday. Entrance examinations begin.

Sept. 15—Wednesday. Registration (including the payment of fees) begins.

Sept. 21—Tuesday. Registration ceases for undergraduate students previously matriculated.*

Sept. 22—Wednesday. Winter Session, 167th year, begins.

^{*}The privilege of later applications or registration may be granted on payment of a fee of \$5.

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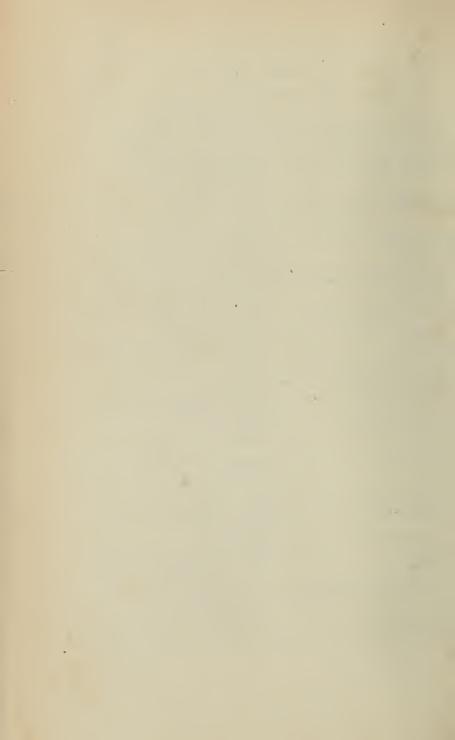
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Teachers College Columbia University

Degrees and Diplomas Conferred

Fellows and Scholars Register of Students 1918-1919

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DEGREES AND DIPLOMAS CONFERRED 1917-1918

TEACHERS COLLEGE

Degree of Doctor of Philosophy. Major in Education

Thomas Alexander, A.B.,* 1910 Chester A. Buckner, A.M., 1911, A.B., Iowa, 1909

Hubert Guy Childs, A.M., Leland Stanford, Jr., 1911, B.S., Minnesota, 1897

Robert Alexander Cummins, A.M., Illinois, 1910, B.S., Illinois Wesleyan, 1909 Alexander Mordecai Dushkin, A.M., 1913,

A.B., C. C. N. Y., 1911 Nickolaus Louis Engelhardt, A.B., Yale, 1903

Nickolaus Louis Engelhardt, A.B., Yale, 1903 Walter John Gifford, A.M., 1911, A.B., Oberlin, 1907

Walter Edward Hoffsommer, A.M., 1916, A.B., Ursinus, 1903

Henry Gustave Hotz, A.M., 1915, Ph.B., Wisconsin, 1913

Paul J. Kruse, A.M., Washington, 1913, A.B., Iowa, 1906

Charles Templeman Loram, A.M., 1907, LL.B., Cambridge, 1905, A.B., Cape of Good Hope, 1900

William Arthur Maddox, A.M., 1911, A.B., William and Mary, 1904

Arthur Raymond Mead, A.M., 1910, A.B., Miami, 1909

Stuart G. Noble, A.M., Chicago, 1910, A.B., North Carolina, 1907

Walter William Pettit, A.M., 1912, B.S., 1911 William Elmer Sealock, A.B., Ohio State, 1905 Marvin James Van Wagenen, A.M., 1912, B.S., 1911

Guy Mitchell Wilson, A.M., 1908, A.B., Indiana, 1900

Walter Thomas Woody, A.B., Indiana, 1913

Teachers College Diploma in Education, awarded in connection with the degree of Doctor of Philosophy

Chester Arthur Buckner, Instructor in Education Hubert Guy Childs, Instructor in Education Robert Alexander Cummins, Instructor in Education

Charles Templeman Loram, Instructor in Education

William Arthur Maddox, Instructor in Education

Stuart Grayson Noble, Instructor in Education Walter Thomas Woody, Instructor in Education

Degree of Master of Arts

L. Dorothy Albrecht, A.B., Stanford, 1916 Clinton McClarty Allen, A.B., Oklahoma, 1912 Oscar William Alm, A.B., Nebraska, 1917 Sarah Jane Anderson, Ph.B., Wooster, 1910 Emma Arent, A.B., Iowa, 1912 Sara Mitchell Armstrong, A.B., Tufts, 1901 Ghodsea Mariam Ashraf Bertha Rose Badanes, A.B., 1914 Agnes Louise Barland, A.B., Oberlin, 1914 Rena Elizabeth Barry, A.B., Trinity, 1917 Margaret Murray Barto, A.B., Illinois, 1917 Lita Battey, A.B., Kansas, 1906; A.M., 1914 Rosa Jackson Baxter, A.B., Drury, 1907 Minna McLeod Beck, B.S., 1914 Charles Frederick Becker, Ph.B., Mt. Union, 1908

Luella Eva Behrens, A.B., Stanford, 1915 Bernhard August Beinlich, A.B., Illinois, 1910 Paul Everett Belting, A.B., Illinois, 1912 Elma Hixson Benton (Mrs.), A.B., Minnesota,

Blanche Louise Birch, A.B., Wellesley, 1902
Avis P. Blaisdell, A.B., Radcliffe, 1911
Gertrude Helena Blanchard, A.B., Smith, 1907
Albert Silvanus Blankenship, B.S., Texas, 1904
Anne Evelyn Boardman, A.B., Boston, 1891
C. Arthur Borklund, A.B., C. C. N. Y., 1904
Blanche Foss Bowdle, B.Pd., Warrensburg
Normal, 1906; B.S., Missouri, 1912
Susie Estella Boyer, A.B., Tarkio, 1906
Martha W. Brecher, A.B., Hunter, 1915
Ira J. Bright, B.S., Kansas State Normal, 1916

* If no institution is mentioned on this and the following pages, the degree indicated was granted by Columbia University.

Mary Juanita Brison, B.S., 1905 Bernard Benjamin Burg, B.S., Chicago, 1914 Barbara Burke, A.B., California, 1917 Beatrice Agatha Burke, A.B., College of St. Elizabeth, 1917 Florence Ethel Busse, A.B., Northwestern, 1908 Margaret Cammack, A.B., Minnesota, 1917 Mary Cornelia Catlin, A.B., Vassar, 1914 Edith Pitt Chace, B.S., 1915 Zah-Ling Chang, A.B., St. John's, 1917 Shirley Mansfield Charles, A.B., Stanford, 1903 Aruba Belle Charlton, Ph.B., Chicago, 1914 Lena Mabel Charter, B.S., West Virginia, 1912 Ho-Chin Chen, A.B., Johns Hopkins, 1917 Monona Lucile Cheney, A.B., Lawrence, 1914 Jennie Mae Clark, B.Pd., Albany Normal, 1901, A.B., Wellesley, 1899 Joseph Lynn Clark, A.B., Texas Christian, 1906 Helen Coe Clowes, B.S., 1914 Oliver Perry Clutts, B.S., Ohio, 1913 Margaret Evertson Cobb, A.B., Vassar, 1917 Wilhelmina Dorothea Cockayne, A.B., Heidelberg (Ohio) 1911 Marion Coffman, A.B., Washington, 1904 William Alfred Coleman, A.B., Ursinus, 1913 Sarah Louise Collins, A.B., Bryn Mawr, 1917 John Harrison Cook, B.S., Ohio Northern, 1908, A.B., Miami, 1912 Corina Bess Cowden, A.B., Oregon, 1914 Arthur Griswold Crane, B.S., Carleton, 1902 Richard McLeod Crawford, B.S., 1905 Catharine Corinne Creamer, B.S., Ohio State, TOT 2 Eugene M. Crouch, A.B., Milligan, 1894 Margaret Winona Ethel Cruise, A.B., Toronto, 1912 Hatty Rosella Dahlberg, B.S., 1916 Zachariah Davies, A.B., Cornell, 1914, B.D., McCormick, 1917 Mary Goodrich Deem, M.C.L., Hillsboro, 1886 Carol A. McCurdy Dewey (Mrs.), A.B., Wesleyan (Ohio) 1913 Clarice Helen Dillenberg, A.B., Cornell, 1916 Grace Louise Dillingham, B.L., Wisconsin, 1900 Florence Helen Doe, A.B., Wellesley, 1909 William Henry Dooley, B.L., Harvard, 1905 Owen R. Easley, A.B., Virginia, 1910 Anna Merritt East, B.L., Nebraska, 1912 William Mark Eierman, A.B., Manhattan, 1915 Earle Edward Emme, A.B., Northwestern, 1916, B.D., Garrett Biblical, 1917 Clinton Ellsworth Farnham, A.B., Yale, 1911 Egbert Erven Fell, A.B., Alma, 1902 Ernest Wilder Fellows, A.B., Grinnell, 1894, A.M., Iowa, 1911 Alexander Fichandler, A.B., New York University, 1905

Helen Atwater Field, B.S., 1913

Cara McCoy Finnie, A.B., California, 1903 Sarah Ellen Fisk, B.S., 1913 Arthur Fordyce Gamber, A.B., Oberlin, 1912 William Carl Giese, B.S., Chicago, 1909 William Henry Gilbert, A.B., Maine, 1909 Ethel Melinda Gilmore, A.B., Hunter, 1915 Jekuthial Ginsburg Josephine Richards Glascock, A.B., Vassar, 1017 Vanessa Glucksmann, A.B., Vassar, 1914 Louis Albert Goldman, A.B., C. C. N. Y., 1913 Edna Winifred Gorton, A.B., Cleveland College for Women, 1913 Bessie Graham, A.B., Wellesley, 1914 Mary Belinda Graham, B.L., Wesleyan (Kansas), 1913 Frank Leon Grove, A.B., Alabama, 1909 Julia Frances Guinee, A.B., Hunter, 1917 Marie Loretta Guinee, A.B., Hunter, 1917 Susie Will Gunter, A.B., Mississippi I. I. and C., 1912 Maria Ruth Guppy, B.L., Michigan, 1887 John Freeman Guy, Ph.B., Wooster, 1910 John Thomas Gyger, B.S., 1913 Raymond Edward Haas, A.B., Gettysburg, 1914 Eleanor Gertrude Hadsell, B.S., 1915 Helen Hagemeyer, A.B., Wellesley, 1916 Mabel Hagemeyer, A.B., Wellesley, 1916 Sarah Deborah Haines, A.B., Oklahoma, 1913 Isabel C. Halgrim, B.S., 1913 Francis Chauncey Hall, B.S., 1916 Margaret Pynchon Hall, A.B., Hunter, 1912 Milford Scott Hallman, Ph.B., Bucknell, 1909 Marian Hamilton, B.S., 1917 Otto Templar Hamilton, LL.B., Indiana, 1911, A.B., Indiana, 1911 Henry Harap, B.S., C. C. N. Y., 1916 Elizabeth Townsend Harned, A.B., Wellesley, Florence Harrison, B.S., Illinois, 1908 Edmond Emmett Hartnett, B.Pd., State Normal, 1905, B.S., 1917 James Proctor Haupin, A.B., New York State. 1910 Mary Alden Morgan Haupt (Mrs.), A.B., Bryn Maur, 1912 Kathleen Valerie Hayes, A.B. Washburn, 1905 Clarence Earle Hedden, M.E., Stevens Institute of Technology, 1904 Bertha Henderson, B.S., Chicago, 1910 Silas Hertzler, A.B., Goshen, 1913, B.D., Yale, Lloyd Franklin Hess, A.B., Lehigh, 1909 Katharine Helen Hicks, B.S., 1917 Ralph Carlyle Hill, B.S., Cornell, 1912 Arthur Abraham Hirschberg, A.B., C. C. N. Y., 1016 M. David Hoffman, A.B., 1915

Lewis Percil Holliday, A.B., Hillsdale, 1910 Margaret Hemerik Holmes, B.S., 1915 Hannah Elizabeth Honeywell, A.B., Mt. Holyoke, 1910

Florence Elizabeth House, B.S., 1915 Lillian A. Hudson, B.S., 1917

Edith Morris Hughes, A.B., Mt. Holyoke, 1917 Pauline Annette Humphreys, Pd.B., Mississippi State Normal, 1911, Ph.B., Chicago, 1915

Leila Wall Hunt, B.S., State College of Washington, 1908

Ella May Hurley, A.B., Hunter, 1917 Josephine Ladner Hutchison, A.B., Illinois, 1917

Lewis Columbus Hylbert, A.B., Bucknell, 1905, A.M., Bucknell, 1908, B.D., Crozier Theological, 1908

Tetsutaro Ikezono, A.B., St. Paul's College (Japan), 1915

Roy Albene Jackson, B.S., Colgate, 1915 Eda Augusta Jacobsen, A.B., Illinois, 1908

Matthieu Jetteur, L.B., College of Verviers-Liège, 1912

Ralph Wallace Johnson, B.S., Franklin, 1911 Vivian Elma Johnson, A.B., Howard, 1912 Elsie Lucina Jones, A.B., College of Emporia, 1010

Esther Van Leer Katz, A.B., Goucher, 1916 Florence Rose Kean, A.B., Trinity, 1917 Maud Keator, B.S., 1914

Richard Carlyle Kelley, A.B., Iowa, 1903 Mary Helene Kneip, B.S., 1915

Martha Grover Knight, B.S., Maine, 1909 Charles Clinton Kochheiser, A.B., Ohio State,

Cline Morgan Koon, B.S., West Virginia, 1915 John Veere Lacy, A.B., Wesleyan (Ohio), 1915, S.T.B., Garrett Biblical, 1917

Eleanor Mary Lally, A.B., Nebraska, 1914 Alter F. Landesman, A.B., Western Reserve, 1917

Harold Atkins Larrabee, A.B., Harvard, 1916 Helen Bell Ledyard, A.B., Stanford, 1917 Shao-Chang Lee, A.B., Yale, 1917

Benjamin Towne Leland, A.B., Harvard, 1906, A.M., Brown, 1917

Geneva Aurora Leonard (Mrs.), Ph.B., Vermont, 1907

Elizabeth Edith Lewis, Ph.B., Vermont, 1907 Laura Frances Lewis, A.B., West Virginia, 1907 Dorothy Alice Lillie, B.S., Michigan, 1917

Katharine Ong-Neo Lim, A.B., Franklin, 1915 Homin Leopold Lin, B.S., Wesleyan (Conn.), 1916

Flora Robertson Lindsay, A.B., Wellesley, 1917 Olivia Catherine Lindsay, A.B., Toronto, 1903 Wilhelmina Lintz, A.B., Miami, 1911 Sara Finney Lowrie, A.B., Goucher, 1916 Nicholas P. Luckenbill, B.E., Pennsylvania State Normal, 1902, A.B., Franklin and Marshall, 1911

Mabel Clare Lytton, B.L., Wesleyan (Ohio), 1908

Leon Sayre McDaniel, A.B., Bethany, 1914 Cecil Clark MacDonald, A.M., Delaware, 1910 Ray Hilton McIntosh, A.B., Hillsdale, 1906 Bertha Frances Mabbett, B.S., New York State, 1917

Arthur Alexander Madison, A.B., Bowdoin, 1910

Samuel Mandel, A.B., C. C. N. Y., 1906 Manuel S. Manongdo, A.B., Otterbein, 1917 Edward Winifred Marcellus, A.B., North-

western, 1909 Mabel Marsh, A.B., Northwestern, 1910 Fred Garman Masters, A.B., Pennsylvania, 1904

Julia Mathews, A.B., Stanford, 1901 Frederica Rutherford Mead, A.B., Smith, 1911 Selma Louise Mesloh, B.S., Ohio State, 1915, A.B., Ohio State, 1915

Gladys Irene Miner, B.S., Wesleyan (Illinois), 1911

Benjamin Franklin Moomaw, B.S., Virginia,

William Louis Morris, A.B., Holy Cross, 1909Robert Rising Morrow, A.B., Wesleyan (Nebraska), 1907

Edwin Justin Nelson, A.B., Western Maryland, 1897

Imogene Neer, A.B., 1916

Katherine Elinor Nenno, B.Di., Iowa State T.C., 1910, A.B., Wyoming, 1914

Maurice J. Neuberg, A.B., Wheaton, 1916 Carl B. Newlon, A.B., Indiana, 1913

Elsie Claire Noble, A.B., Coe, 1908 Fayette Albert Norris, B.S., New Lynn, 1901, Ph.B., Wooster, 1909

Edith Georgina O'Brien, A.B., Hunter, 1915 Edgar A. O'Dell, A.B., Indiana, 1912

Roy E. Offenhauer, B.S., Marion Normal, 1903, A.B., Otterbein, 1905

Mary Emilia Olson, Ph.B., Hamline, 1903 Junia Osterhout, A.B., Baylor, 1895, B.S., 1917 Antoinette Pantano, A.B., Hunter, 1917

Walter Guy Parker, A.B., Southwestern, 1912 Lena Estelle Patterson, A.B., Ohio, 1909, B.S., Ohio, 1914

Jacobus Cornelius Pauw, A.B., Victoria (South Africa), 1911

Alvin Clarence Payne, A.B., Wabash, 1904 Joseph Pearlman, B.L., 1915

Marjorie Peet, A.B., Vassar, 1911

Selma Marie Peters, A.B., Adelphi, 1916
William Richard Phelps, A.B., Randolph Macon, 1908

Frances Philo, A.B., Iowa State, 1913

Frank Gerald Pickell, A.B., Indiana, 1909
Mary Pickett, A.B., Smith, 1898
Franklin Edwin Pierce, A.B., Amherst, 1905
Helena Piotrowska, A.B., Cornell, 1909
Oscar Morton Pittenger, A.B., Indiana, 1896
Elmer Lloyd Porter, A.B., Otterbein, 1907
Aaron Ely Price, B.S., Canisius, 1917
Olive Fawcett Pye, A.B., Smith, 1910
Estabrook Rankin, A.B., California, 1915
Fanny Allen Ray, B.S., Chicago, 1910
Katharine Mifflin Reigart, B.S., 1916
Ballard Delbert Remy, Ph.B., Franklin, 1902
Marguerite Richardson, A.B., Mt. Holyoke, 1911

Elmer Roy Rike, A.B., Wesleyan (Ohio), 1905 Annie Brice Robinson, A.B., Texas, 1917 Elizabeth Neal Rogers, A.B., Wesleyan (Georgia), 1905, B.S., Peabody, 1917 Wentworth Rogers, A.B., Iowa State, 1912

Mamie E. Rohr, B.S., 1917

Francis Howard Rose, A.B., Colby, 1909, B.D., Newton Theological, 1912

Dora Ruland, A.B., Syracuse, 1915 Eugenia Elizabeth Rutherford, A.B., Illinois, 1915

Ethel Imogene Salisbury, A.B., Illinois, 1913 Carolyn Bernice Sanford, Pd.B., Michigan State Normal, 1908

Agnes Saunders, A.B., Colorado State T. C., 1905, Pd.M., Colorado State T. C., 1912 Wilbour Eddy Saunders, A.B., Brown, 1916 Harriet Sawyer, A.B., Vassar, 1907

Clara Agnes Scott, B.S., 1913
Ruth Lansing Scudder, A.B., Welles

Ruth Lansing Scudder, A.B., Wellesley, 1916 Blanche Elaine Shaffer, B.S., 1912

Erwin Leander Shaver, A.B., Lawrence, 1913, A.M., Lawrence, 1914, St. B. Garrett Biblical, 1916

Charles Wilson Shoop, A.B., Lebanon Valley, 1908

Carl Nathaniel Shuster, B.S., 1915 John Wesley Simmons, A.B., Dickinson, 1903 Evelyn Worthley Sites (Mrs.)

Clarence Morey Smail, A.B., Bethany, 1908, B.D., Yale, 1910

Max Small, A.B., Clark, 1915

Annette Minrow Smith (Mrs.), Ph.B., Chicago, 1917

Clarence Nevel Smith, B.L., California, 1912 Fred Tredwell Smith, A.B., Harvard, 1915 Marguerite Smith, A.B., Vassar, 1903

Marguerite Levia Smith, B.S., 1916 Olive J. Smith, Ph.B., Alma, 1907

Mordecai Soltes, B.S., New York University, 1915 William Alexander Spencer, A.B., Washburn,

William Alexander Spencer, A.B., Washburn,

James Arthur Starkweather, A.B., Shurtliff,

Dora Alice States, B.S., Ohio State Normal, 1917

Margery Stewart, A.B., Pennsylvania College for Women, 1914

Frances Albertine Stobaugh, B.S., 1917 George Francis Stratton, A.B., Harvard, 1913 John Ward Studebaker, B.S., Leander Clark, 1910

Alice Pierson Swetman (Mrs.), A.B., Mt. Holyoke, 1913

Ralph Waldo Swetman, Ph.B., Hamilton, 1907 Gordon Clarke Swift, A.B., Lebanon, 1909, A.B., Yale, 1911

William Kiyoshi Takayama

Yuet Ha Anna Tang, A.B., Oberlin, 1917 Nellie Florence Taylor, A.B., Illinois, 1908 Muriel Kathleen Terry, A.B., 1917

Clare Carlyle Thompson, B.S., Kansas State Normal, 1916

William Burton Thornburgh, A.B., Iowa, 1908 Isabelle Sophia Tour, A.B., Colorado, 1914 Elinor Bushnell Townsend, B.S., 1917 Herbert A. Trapp, Ph.B., Hamline, 1904 John James Harrington Traynor, B.S., New

York University, 1913 Eunice Miriam True, A.B., Wisconsin, 1905,

B.S., 1916 Edna Adams Vail, B.S., 1914

Leora Vail, Ph.B., Wisconsin, 1911

Martha Montague Van Allen, A.B., Vassar, 1916

William Henry Vogel, A.B., Indiana, 1912 Alice Mary Walker, A.B., Wisconsin, 1907 Wen-Pei Wang, B.S., Pennsylvania, 1917 Grace Bools Warner, A.B., Cornell, 1913 Louella Orange Webb, Ph.B., Hamline, 1901 Curtis Porter Weeks, B.S., New York University, 1912

Letitia Eleanor Weer, B.S., 1915
Mae Lavinia Wells, B.S., 1914
Frances Louise West, A.B., Agnes Scott, 1915
Luella Nolice Collette Whitaker, B.S., 1917
Edith Estelle White, Ph.B., Wisconsin, 1901
Byron Frank Whitford, A.B., Alfred, 1900
Mary Marguerite Whitmarsh, A.B., Wellesley,

Olive Margaret Whitworth, A.B., Western

Reserve, 1900
Alma Wichelns, A.B., Cornell, 1915
Theodore DuBois Wiggins, B.S., 1917

William Albert Wilkinson, B.S., Missouri, 1910,

A.M., Missouri, 1911 Grace Irene Williams, B.S., 1910

Florence Margaret Wilson, A.B., Washington, 1915

Maurice Cleveland Wilson, Ph.B., Lafayette, 1912

William Henry Wilson, B.S., 1909

Boyd Fiedler Winkelblech, A.B., Franklin and Marshall, 1909

Jet Corine Winters, A.B., Texas, 1911, B.S., 1915

Adela Zoe Wolcott, Ph.B., Chicago, 1909 La Vergne Wood, A.B., Wisconsin, 1910 Marjorie Burton Woodford, A. B., Pomona, 1916 Jessie Heguembourg Woodruff (Mrs.), A.B., Vassar, 1904

Hunter Chi-Ching Yen, A.B., Boone, 1914 Martha Mae Zachman, B.S., Northwestern, 1907

Walter Albert Zaugg, A.B., B.Pd., Valparaiso, 1908, A.B., Indiana, 1913
Alice Marguerite Zouck, A.B., Goucher, 1914

Degree of Master of Science

Edith D. Brownell, B.S., Iowa State, 1915 Emma Dolfinger, Ph.B., Chicago, 1903 Florence Louise Kenway, B.S., 1914 Janet Louise McQuaid, A.B., Trinity, 1908

Teachers College Diploma in Education, awarded in connection with the Degree of Master of Arts

Clinton McClarty Allen,

Superintendent of Schools
Oscar William Alm, Superintendent of Schools
Sarah Jane Anderson, Teacher of English
Sara Mitchell Armstrong,

Supervisor in Normal Schools Agnes Louise Barland, Teacher of English

Rena Elizabeth Barry,

Teacher of Household Arts
Margaret Murray Barto,

Teacher of Hygiene and Physical Education Lita Battey, Teacher of English Rosa Jackson Baxter, Psychologist Charles Frederick Becker,

Superintendent of Schools Luella Eva Behrens, Psychologist Bernard August Beinlich, Director of Industrial

Arts and Vocational Education Elma Hixson Benton (Mrs.), Teacher of History Blanche Louise Birch,

Supervisor of Kindergartens
C. Arthur Borklund, Supervisor of English
Blanche Foss Bowdle, Teacher of Education
Susie Estella Boyer, Teacher of Scouling
Martha W. Brecher, Teacher of Mathematics
Ira J. Bright, Superintendent of Schools
Bernard Benjamin Burg, Director of Industrial
Arts and Vocational Education

Barbara Burke, Teacher of History
Beatrice Agatha Burke, Teacher of Latin
Mary Cornelia Catlin,

Teacher of Hygiene and Physical Education Edith Pitt Chace, Supervisor of Household Arts Ira T. Chapman, Superintendent of Schools Shirley Mansfield Charles,

Supervisor of Fine Arts
Aruba Belle Charlton,

Supervisor of Elementary Schools Lena Mabel Charter,

Supervisor of Household Arts

Clara Frances Chassell, Psychologist Laura Merrill Chassell, Psychologist Ho-Chin Chen, Teacher of Education Jennie Mae Clark, Teacher of Mathematics Joseph Lynn Clark, Teacher of History Helen Coe Clowes,

Supervisor of Kindergariens
Oliver Perry Clutts, Superintendent of Schools
Margaret Evertson Cobb, Psychologist
Wilhelmina Dorothea Cockayne,
Supervisor of English

Marion Coffman, Teacher of English
Frank Cohen, Teacher of History
Sarah Louise Collins, Teacher of History
John Harrison Cook, Superintendent of Schools
Corina Bess Cowden, Teacher of English
Eugene M. Crouch, Superintendent of Schools
Margaret Winona Ethel Cruise.

Teacher of Household Arts Hatty Rosella Dahlberg,

Supervisor of Household Arts Florence Helen Doe,

Supervisor in Foreign Schools Earle Edward Emme,

Supervisor of Religious Education

Clinton Ellsworth Farnham,

Principal of High Schools
Eghert Erven Fell. Superintendent of Schools

Egbert Erven Fell, Superintendent of Schools Ernest Wilder Fellows, Superintendent of Schools Helen Atwater Field,

Supervisor of Elementary Schools Cara McCoy Finnie, Supervisor of English Arthur Fordyce Gamber, Teacher of History William Henry Gilbert,

Principal of High Schools Ethel Melinda Gilmore, Teacher of Fine Arts Josephine Richards Glascock, Psychologist Vanessa Glucksmann,

Teacher of Hygiene and Physical Education Mary Belinda Graham, Teacher of English

Frank Leon Grove, Principal of High Schools Marie Loretta Guinee, Teacher of Mathematics John Thomas Gyger, Superintendent of Schools Helen Hagemeyer, Teacher of Household Arts Sarah Deborah Haines, Teacher of Household Arts, Supervisor of Household Arts

Louise May Hall, Teacher of Scouting Margaret Pynchon Hall,

Teacher of Household Arts Milford Scott Hallman,

Principal of High Schools Marian Hamilton, Teacher of Household Arts Otto Templar Hamilton,

Superintendent of Schools Elizabeth Townsend Harned, Adviser of Girls Florence Harrison, Supervisor of Household Arts Edmond Emmett Hartnett,

Supervisor of Industrial Arts Mary Alden Morgan Haupt (Mrs.), Psychologist Kathleen Valerie Hayes, Teacher of Latin

Clarence Earle Hedden, Director of Industrial Arts and Vocational Education

Lewis Percil Holliday, Superintendent of Schools Florence Elizabeth House,

Supervisor of Industrial Arts

Lillian A. Hudson,

Supervisor of Public Health Nursing Leila Wall Hunt, Supervisor of Household Arts Ella May Hurley, Teacher of Latin

Roy Albene Jackson, Superintendent of Schools Eda Augusta Jacobsen,

Teacher of Household Arts Ralph Wallace Johnson,

Superintendent of Schools Vivian Elma Johnson, Teacher of English Elsie Lucina Jones, Teacher of Household Arts Esther Van Leer Katz, Teacher in Kindergartens Maud Keator, Supervisor of Special Classes

Richard Carlyle Kelley, Director of Industrial Arts and Vocational Education

Martha Grover Knight, Supervisor of Elementary Schools, Teacher of Rural Education Charles Clinton Kochheiser,

Superintendent of Schools Cline Morgan Koon, Superintendent of Schools

Alice Marie Krackowizer, Supervisor of Elementary Schools

Eleanor Mary Lally, Teacher of English Harold Atkins Larrabee.

Supervisor of Religious Education Helen Bell Ledyard, Teacher of Household Arts Shao-Chang Lee, Teacher of Education

Benjamin Towne Leland, Director of Industrial Arts and Vocational Education

Geneva Aurora Leonard (Mrs.),

Teacher of English

Flora Robertson Lindsay.

Teacher of Household Arts Wilhelmina Lintz, Superintendent of Schools

Nicholas P. Luckenbill.

Superintendent of Schools Mabel Clare Lytton, Adviser of Women Cecil Clark MacDonald,

Superintendent of Schools Maude Agnes McElroy, Teacher of English Ray Hilton McIntosh,

Superintendent of Schools Bertha Frances Mabbett.

Teacher of Household Arts Arthur Alexander Madison,

Teacher of Education Julia Mathews, Psychologist

Otto Mayer, Supervisor of Religious Education Gladys Irene Miner, Teacher of Household Arts William Louis Morris, Teacher of English Robert Rising Morrow,

Superintendent of Schools Herbert Hays Murphy,

Superintendent of Schools

Maurice J. Neuberg.

Supervisor of Religious Education Carl B. Newlon, Principal of High Schools Fayette Albert Norris.

Teacher of Physical Science Antoinette Pantano, Teacher of French Walter Guy Parker,

Supervisor of Religious Education Lena Estelle Patterson, Supervisor of Fine Arts Alvin Clarence Payne,

Superintendent of Schools Frank Gerald Pickell, Principal of High Schools Mary Pickett, Teacher of French Franklin Edwin Pierce.

Superintendent of Schools Helena Piotrowska, Teacher of Education Oscar Morton Pittenger,

Superintendent of Schools Elmer Lloyd Porter, Superintendent of Schools Aaron Ely Price, Teacher of History Olive Fawcett Pye, Teacher of Biology Estabrook Rankin, Teacher of English Fanny Allen Ray, Teacher of Mathematics Katharine Mifflin Reigart, Teacher of English Ballard Delbert Remy,

Superintendent of Schools

Elmer Roy Rike, Superintendent of Schools Elizabeth Neal Rogers, Teacher of Latin Wentworth Rogers, Superintendent of Schools Dora Ruland,

Teacher of Hygiene and Physical Education Omar T. Sadler, Superintendent of Schools Carolyn Bernice Sanford, Adviser of Women Agnes Saunders, Adviser of Women Harriet Sawyer, Adviser of Women Clara Agnes Scott, Teacher of English

Blanche Elaine Shaffer, Supervisor of Household Arts Erwin Leander Shaver,

Supervisor of Religious Education James Harry Shoemaker, Supervisor of English Carl Nathaniel Shuster,

Supervisor of Mathematics

Evelyn Worthley Sites (Mrs.),

Supervisor in Foreign Schools

Max Small, Teacher of Mathematics

Clarence Nevel Smith,

Principal of High Schools

Pred Tredwell Smith,

Supervisor of Religious Education Olive J. Smith, Teacher of English

William Alexander Spencer,

Principal of High Schools

James Arthur Starkweather,

Principal of Junior. High Schools Dora Alice States, Supervisor in Normal Schools Frances Albertine Stobaugh, Teacher of German John Ward Studebaker,

Superintendent of Schools

Alice Pierson Swetman (Mrs.),

Teacher in Kindergartens

Ralph Waldo Swetman,

Superintendent of Schools

Yuet Ha Anna Tang, Teacher of English Nellie Florence Taylor, Teacher of English Muriel Kathleen Terry,

Teacher of Hygiene and Physical Education Clare Carlyle Thompson.

Superintendent of Schools

Isabelle Sophia Tour,

Supervisor of Mathematics

Elinor Bushnell Townsend,

Teacher in Kindergartens Herbert A. Trapp, Superintendent of Schools

John James Harrington Traynor,

Teacher of Mathematics

Leora Vail, Supervisor of Elementary Schools William Frederick Vogel,

Superintendent of Schools

Alice Mary Walker, Adviser of Girls Wen-Pei Wang, Teacher of Education Grace Bools Warner, Teacher of English Louella Orange Webb, Teacher of English Curtis Porter Weeks, Superintendent of Schools Letitia Eleanor Weer,

Supervisor of Household Arts

Frances Louise West, Teacher of Biology Edith Estelle White, Teacher of English Byron Frank Whitford,

Superintendent of Schools

Mary Marguerite Whitmarsh,

Teacher in Kindergartens
Olive Margaret Whitworth, Supervisor of
Hygiene and Physical Education

Alma Wichelns, Supervisor of Hygiene and Physical Education

Florence Margaret Wilson,

Teacher of Fine Arts

Boyd Fiedler Winkelblech,

Principal of High Schools La Vergne Wood, Supervisor of Mathematics Marjorie Burton Woodford, Teacher of Spanish Martha Mae Zachman, Teacher of English Walter Albert Zaugg, Superintendent of Schools

Degree of Bachelor of Science

Grace Abbott, Rosamond Adams, Sara Virginia Ahrens, Solomon Amster, Alice Linnea Anderson, Ernest Mitchell Anderson, Margaret Andrews, Grace Bessilene Armstrong, Evelyn E. Atwood, Bessie Avchen, Martha Elizabeth Bain, Florence Baldwin, Marion Katherine Ballou, Edith M. Barber, Bertie Ford Barnes, Earl W. Barnes, Percival Simpson Barnes, Adelaide A. Barts, Sera Agnes Baumgartner, Clara Bradford Beasley, William Watson Beaumont, Etta Sophia Bebee, Kathleen Sue Beck (Mrs.), Lola Agnes Beelar, Rama Virginia Bennett, Miriam Black, Marguerite Isabel Blancke, Elizabeth Caroline Blatz, Helen Canon Bliven, Eleanor Miot Boatwright, Madge Tozer Bogart, Sarah Helen Bridge, Eleanor Tyson Bridgman (Mrs.), Margeret Boughton Brinckerhoff (Mrs.), Helen Brodie, Bess Evelyn Brown, Elizabeth Kirkbride Brown, Mae Castle Brown, Marguerite E. Brown, John Buckley Bryan, Meta Dorothea Buermeyer, Louise R. Mantell Burns (Mrs.), Alma Dorothea Buschmann, Theodosia Tucker Callaway, Rosamond Inez Carey, Mabel Carney, Frances Winifred Castello, Nina Lenita Chamberlain, Sze-yi Chang, Maude Frances Chaplin, Mary Morris Clayton, Isabel Clegg, Mildred Ethel Coffin, Margaret Helen Cole, Gertrude Edith Conant, Edith Conger, Alice E. Conway, Gladys H. Cook, Sherman Robley Cook, Katharine Marie Cooper, Robert C. Craig, Kathryn Townsend, Minor Crawford (Mrs.), L. Teresa Cronin, Maud Genevie Crossett, Daniel Joseph Crowley, Elizabeth Jean Davidson, Lois Hegeman Davis, Marjorie Alice Dick, Marion Elleda Dickenson, Nellie E. Dowd, Muriel Constance Eastburn, Gertrude Frances Eaton, Lynda Erna Eberbach, Rena Sara Eckman, Alice M. Edling, Dorothy Winthrop Emery, May Evans, Marjorie Ewing, Vera V. Fanning, Ethel Farrington, Veta Franklin, Florence Dodge Frear, Lucile Grace French, Helen Frost, Florence Idele Fuller, Estelle Ganz, Beatrice Sturtevant Gardner, Clara Severine Gilbert, Doris Gillard, Edith Gladys Gilman, Esther Alice Gilman, Alta Given, Myra Harriett Goddard, Florence Kleiner Goodman, Katharine Brown Goodrich, Mary Leila Gordy, Hulda Maud Gotshall, Annie Broome Gray, Rose Ruth Greenwald,

Mary Greig, Lula Cobleigh Grove, Marian Rockefeller Guernsey, Jessie Catherine Guthrie, Marian Jane Hagadorn, Louise Caroline Hahn, Grace May Halcy, Hiram Emory Hall, Bertha Harmer, James Edward Harris, Bertha Katherine Haskins, Charlotte Herckner, Emma Charlotte Hess, Hannah Hill, Ruth Elizabeth Hill, Barta Emma Hilliard (Mrs.), Ada Adelia Hillier, Eleanor Hillhouse, Edna B. Hindennach, Katharine Rebecca Hirst, Rebekah Barnett Hoffman, Louise Gertrude Holbrook, Gertrude Gray Hollis, Helen Irene Hume, Mabel Foster Huntly, Mabel Ione Hutchings. Barney Hyman, Mary Gillespie Illman, Winifred Anne Ingerson, Edith Inks, Anna B. Ireland, Jessie Taylor Isles (Mrs.), Jacob Jaffe, Rebecca Sinclair Janney, Emma Botilda Jensen, Sarah E. Johnson, Anita Louise Duncker Jones (Mrs.), Helen F. Webb Jones, Louise Kaster, Anna Randolph Keim, May Dunkin Kemp, May Kennedy, Olive Ingalls Kennedy, Mary Douglas Kennerly, Helen Tefft Kingsley (Mrs.), Marguerite Josephine Klauberg, Emma Evelyn Knight, Agnes Marie Kolshorn, Dora Kreykenbohm, Luise Heinrich Kudlich, Edna Emma Lamson, Elizabeth Clara Lange, Henrietta M. Langner, Louise Berner Lantz, Jessie Elizabeth La Salle, Margaret Bell Lawsing, Iva Marjorie Leach, Evelyn Marcella Lee, Katherine F. Lee, Louis A. Tirapsgui Leiva, Chien Hsün Li, Madeline L. Libert, Inez Mae Lied, Helen Louise Lisle, Fanny Lissauer, Elizabeth Reese Little, Dorothy Augusta Lloyd, Lillian Hendrickson Locke, Josephine Loeb, Gertrude Longley, Daniel Christopher Lucey, Marie Gustava Lundberg, Mary Therèsa Lutz, Bess Lydia McAllister, Jessie MacClymonds, Harriette Elizabeth MacFadden, Nina Viola McFarlane, Matilda Jane McGownd, Mary Waters McKechnie, Margaret McLean, Florence Edith McLouth, Helen May MacMillan, Janet MacNaughton, Irene Marie Mack, Pattronella Marie Maddi, Gilbert Main, Catharine Linsly Maltby, Margaret Elder Mann, Lola May March, Salome Ellen Marckwardt, Frances V. Mason, Dorothea Elizabeth Matteson, Evelyn S. Mayer, Winfred C. P. Meddins, Eugene L. Mendenhall, Elizabeth Rider Merritt, Helen Louise Meserve, Ida Ruth Meyer, Marea Miller, Mary May Miller, Marian Emily Mills, Helen Browne Moran, Florence Moses, Mabel Eliza Moss, Marjorie Wayne Mullin, Katherine Marie Mulry, Robert Stevens Myers, Elizabeth Churchill Nickerson, Rosalind Urquhard Norris, Lucille Rebecca Nusbaum, Mary Patricia O'Donnell, John William Ellery Olin, Sigurd B. Olson, Gretchen Pond Ostrander, Dora Marie Otto, Helen Mildred Owen, Frank Charles Panuska, La Vinna Parke, Mary Alice Parkinson, E. Maud Patchin, Grace Agnes Pattison, Lillian Peek, Blanche Pepple, Caroline Finninger Peterson, Celia Gertrude Phelps, Elizabeth Barclay Phillips, Ethel Blanche Pickett, Eleanor Dawson Pinkerton, Elsa Pohl, Louise Elizabeth Poull, Mary McCue Price, Reuben Randall Purcell, Frances Jacot Quilliard, Helen Rabinowitz, Marion Britton Rafferty, William LeRoy Raisch, Margaret Elizabeth Rapp, Katharine Reidy, Lucy N. Retting, Helen Mary Reynolds, Ella Rhodes, Damaris Risner, Margaret Ritchie, Margaret Jane Robertson, William David Robertson, Dora Roble, Carolyn Isabelle Rodgers, Gertrude Roose, Abraham Rosenthal, Jessie Dolsen Ross, Marion Arletta Ross, Helen Royce, Helen E. Hobbs Russell, Julia Ryder, Ethel Trippett Leffingwell Sample (Mrs.), Mary Lillian Schapiro (Mrs.), Elsa Schmidt, Emily Catherine Schoder, Frederick Conrad Schoening, Berthe Catherine Schutz, Mae Louise Schwarz, Ethel Catharine Scofield, Florence M. Scott, Flora Secttor, Myrta Dorothy Shank, Barney Shapiro, Grace Phyllis Sheets, Katharine Gloria Sheldon, Mary Wheaton Sherman, Marion Jay Sherwood, Anna Gertrude Shigo, Caroline Anna Sibley, Gertrude Augusta Siebert, Grace E. Siglar, Marjorie Sime, Anne D. Simrall, Pattie Lucile Sinclair, Bertha A. Sing, Mildred L. Sipp, Frances Hortense Smith, Irene Marie Smith, Elmer W. Snyder, Samuel S. Solender, Elizabeth Adelle Spaulding, Lulu Elise Stallmann, Anna P. K. Stapler, Cora Ann Steele, Freida Steinschneider, Louise Sophia Steinway, Mary Cline Sterrett, Harold Dunckel Stevens, Florence H. Stewart, Alice Marguerite Stickney, Dorothy Anderson Storms, Josephine E. Stull, Minnie Suckow, Margaret Sweet, Freda Virginia Syze, Christine Agnes Taylor, Mary Alvira Taylor, Frances A. Terrill, Florence Terry, Mary Scott Thayer, Charles Henry Thomas, Mary Dann Thomas, Stella Irene Trane, Edith Howard Tressler (Mrs.), Sarah Louise Treyz, Ethel Long Troy, Sarah Spalding Tupper, Mary Brookings Tuttle, Georgiana Tyler, Evelyn Tyndall, Luba Christo Tzetanova, Emma Matilda Ueland, Lena Chew Van Bibber, Gladys Van Riper, Frieda Van Sickle, Elsie Marion Van Volkenburgh, Roy Benjamin Vaughan, Katherine Allen Waller, Elizabeth Zabriskie Walser, Gladys Josephine Ward, Kaethe Supplies Waters, Ellen Pike Watson, Esther Watson, Marion Evelyn Watson, Rosalie Wheelock Watson, Anna R. Weber, Ernest Lester Welborn, Anna Hunt Welles, Grace Taylor Wellwood, Mabel Elizabeth Westgate, Gladys Sherwin White, Eda G. Willard, Mary N. Williams, Effie May Williamson, Pauline Brooks Williamson, Eva Wilson, Florence Alden Wilson, Amelia Winford, Mabel Corinne Wood, Emma Parks Deal Wright, Clarissa Loretta Gertrude Zons.

Teachers College Diploma in Education, awarded in connection with the degree of Bachelor of Science

Solomon Amster,

Teacher of Hygiene and Physical Education Grace Bessilene Armstrong,

. Teacher of Household Arts Evelyn E. Atwood, Supervisor of Kindergartens Martha Elizabeth Bain.

Teacher of Household Arts

Marion Katherine Ballou,

Teacher of Household Arts Edith M. Barber, Teacher of Household Arts Percival Simpson Barnes,

Superintendent of Schools Adelaide A. Barts, Teacher of Household Arts Sera Agnes Baumgartner,

Teacher of Household Arts

Clara Bradford Beasley,

Teacher of Household Arts

Willian Watson Beaumont,

Supervisor of School Music Etta Sophia Bebee, Supervisor of School Music Kathleen Sue Beck (Mrs.), Teacher of Geography Rama Virginia Bennett,

Teacher of Household Arts

Marguerite Isabel Blancke,

Teacher of Household Arts Madge Tozer Bogart, Teacher of Household Arts Sarah Helen Bridge,

Supervisor of Household Arts Helen Brodie, Teacher of Household Arts

Bess Evelyn Brown, Teacher in Primary Schools Elizabeth Kirkbride Brown,

Teacher in Elementary Schools John Buckley Bryan, Teacher of Industrial Arts Meta Dorothea Buermyer,

Supervisor of School Music

Theodosia Tucker Callaway (Mrs.),

Supervisor of Mathematics

Frances Winifred Castello,

Teacher of Household Arts
Nina Lenita Chamberlain.

Teacher of Household Arts

Maude Frances Chaplin,

Teacher of Household Arts Mary Morris Clayton,

Teacher of Household Arts
Isabel Clegg, Teacher of Household Arts

Mildred Ethel Coffin, Teacher of Household Arts Gertrude Edith Conant,

Teacher of Household Arts

Gladys H. Cook,

Teacher of Hygiene and Physical Education Sherman Robley Cook,

Supervisor of Industrial Arts

Katharine Marie Cooper,

Teacher of Hygiene and Physical Education

George William Craig,

Superintendent of Schools

Robert C. Craig, Teacher of Industrial Arts Kathryn Minor Crawford (Mrs.),

Teacher of Household Arts

Maud Genevie Crossett, Teacher of Fine Arts Daniel Joseph Crowley,

Supervisor of Industrial Arts

Elizabeth Jean Davidson,

Teacher of Household Arts
Lois Hegeman Davis, Teacher of Household Arts
Marjorie Alice Dick, Teacher of Fine Arts
Marion Elleda Dickenson, House Director
Nelle E. Dowd, Teacher of Household Arts
Lynda Erna Eberbach,

Teacher of Household Arts Rena Sara Eckman, Dietitian

Alice M. Edling, Teacher of Household Arts Ida M. Eells, Teacher of Household Arts Dorothy Winthrop Emery,

Teacher of Household Arts

Mary Evans, Teacher of Household Arts Marjorie Ewing, Teacher of Mathematics Vera V. Fanning, Teacher of Household Arts Elizabeth E. Farrell,

Supervisor of Special Classes Ethel Farrington, Teacher of Household Arts Veta Franklin, Supervisor of Household Arts Lucile Grace French,

Supervisor of Household Arts

Helen Frost,

Teacher of Hygiene and Physical Education Florence Idele Fuller,

Teacher of Hygiene and Physical Education
Estelle Ganz, Teacher of Household Arts
Beatrice Sturtevant Gardner.

Teacher of Fine Arts

Clara Severine Gilbert,

Supervisor of Primary Schools

Doris Gillard, Teacher of Household Arts Alta Given, Teacher of Household Arts Myra Harriett Goddard, Teacher of Fine Arts Mary Leila Gordy, Teacher of Household Arts Hulda Maud Gotshall,

Teacher of Household Arts

Annie Broome Gray,

Teacher of Industrial Arts

Mary Grieg, Teacher of Household Arts Lula Cobleigh Grove,

Supervisor of Elementary Schools Marian Rockefeller Guernsey,

Teacher of Household Arts

Jessie Catherine Guthrie,

Teacher of Hygiene and Physical Education Marion Jane Hagadorn,

Teacher of Hygiene and Physical Education

Louise Caroline Hahn, Teacher of Household Arts James Edward Harris, Teacher of English Edmond Emmett Hartnett,

Teacher of Industrial Arts Hannah Hill, Teacher of Household Arts Ruth Elizabeth Hill, Teacher of Fine Arts Eleanor Hillhouse, Teacher of Household Arts Barta Emma Hilliard (Mrs.),

Teacher of Household Arts

Ada Adelia Hillier,

Supervisor of Household Arts Gertrude Gray Hollis, Teacher of English Helen Irene Hume, Supervisor of Kindergartens Mabel Ione Hutchings, Teacher of Fine Arts Barney Hyman,

Teacher of Hygiene and Physical Education Mary Gillespie Illman,

Teacher of Household Arts

Winifred Anne Ingerson,

Teacher of Household Arts

Edith Inks, Teacher of Mathematics

Rebecca Sinclair Janney, House Director

Emma Botilda Jensen,

Teacher of Household Arts

Anita Louise Duncker Jones (Mrs.),

Teacher of Household Arts

Helen F. Webb Jones,

Teacher of Hygiene and Physical Education May Dunkin Kemp, Teacher of Household Arts May Kennedy, Superintendent of Nurses and Principal of Training Schools

Mary Douglas Kennerly,

Teacher of Household Arts

Helen Tefft Kingsley (Mrs.),

Teacher of Household Arts

Marguerite Josephine Klauberg,

Teacher of Household Arts
Emma Evelyn Knight,

Teacher of Household Arts

Agnes Marie Kolshorn,

Teacher of Household Arts

Dora Kreykenbohm, Teacher of German

Edna Emma Lamson,

Supervisor of Elementary Schools Louise Berner Lantz, Teacher of Household Arts Jessie Elizabeth La Salle,

Supervisor of Kindergartens Margaret Belle Lawsing, Teacher of Fine Arts Katherine F. Lee,

Supervisor of Elementary Schools Inez Mae Lied, Teacher of Household Arts

Helen Louise Lisle,

Supervisor of Elementary Schools Fanny Lissauer, Public Health Nurse Elizabeth Reese Little,

Supervisor of Primary Schools Dorothy Augusta Lloyd,

Teacher of Hygiene and Physical Education

Lillian Hendrickson Locke,

Teacher of Household Arts Gertrude Longley, Teacher of Household Arts Daniel Christopher Lucey,

Teacher of Industrial Arts Marie Gustava Lundberg,

Teacher of Household Arts
Mary Theresa Lutz.

Supervisor of Play and Playgrounds Helen May MacMillan,

Teacher of Household Arts Irene Marie Mack, Teacher of Household Arts Pattronella Marie Maddi, Teacher of Fine Arts Gilbert Main,

Teacher of Hygiene and Physical Education
Margaret Elder Mann,

Teacher of Household Arts
Salome Ellen Marckwardt.

Teacher of Hygiene and Physical Education Burr Martyn, Teacher of English

Frances V. Mason, Teacher of Latin

Dorothea Elizabeth Matteson,

Teacher of Household Arts Winfred C. P. Meddins,

Supervisor of Industrial Arts Elizabeth Rider Merritt, Teacher of Fine Arts Marea Miller, Teacher of Household Arts Mary May Miller, Supervisor of Household Arts Mabel Eliza Moss, Teacher of Household Arts Katherine Marie Mulry,

Supervisor of Elementary Schools Robert Stevens Myers.

Supervisor of Elementary Schools Lucille Rebecca Nusbaum,

Teacher of Household Arts
Mary Patricia O'Donnell,

Teacher of Hygiene and Physical Education
John William Ellery Olin, Director of Industrial
Arts and Vocational Education

Frank Charles Panuska,

Supervisor of Industrial Arts E. Maud Patchin, Teacher of Household Arts Grace Agnes Pattison,

Grace Agnes Pattison,

Supervisor of Elementary Schools

Lillian Peek, Supervisor of Household Arts

Blanche Pepple, Supervisor of Rural Education Caroline Finninger Peterson,

Teacher of Household Arts

Celia Gertrude Phelps,
Supervisor of Elementary Schools

Elizabeth Barclay Phillips,

Teacher of Household Arts Eleanor Dawson Pinkerton,

Teacher of Household Arts

Elsa Pohl,

Teacher of Hygiene and Physical Education Louise Elizabeth Poull,

Supervisor of Special Classes Reuben Randall Purcell, Teacher of Fine Arts Frances Jacot Quilliard,

Teacher of Household Arts Helen Rabinowitz, Teacher of Household Arts Marion Britton Rafferty,

Teacher of Household Arts Margaret Elizabeth Rapp,

Teacher of Household Arts

Lucy N. Retting,

Teacher of Hygiene and Physical Education Ella Rhodes, Teacher of Household Arts Damaris Risner, Teacher of Household Arts Margaret Ritchie, Teacher of Household Arts Margaret Jane Robertson, Teacher of Fine Arts William David Robertson,

Supervisor of Industrial Arts
Dora Roble, Critic Teacher in Normal Schools
Abraham Rosenthal,

Supervisor of Hygiene and Physical Education Jessie Dolsen Ross, Teacher of Household Arts Marion Arletta Ross, Teacher of Household Arts Helen Royce, Teacher of Household Arts Helen E. Hobbs Russell (Mrs.).

Teacher of Religious Education Julia Ryder, Superintendent of Schools Mary Lillian Schapiro (Mrs.),

Teacher of Household Arts
Elsa Schmidt, Supervisor of Nurses and Principal of Training Schools
Emily Catherine Schoder,

Teacher of Household Arts Frederick Conrad Schoening,

Teacher of Fine Arts
Berthe Catherine Schutz, Teacher of French
Ethel Catharine Scofield.

Teacher of Hygiene and Physical Education Florence M. Scott, Teacher of Household Arts Flora Secttor, Teacher of Household Arts Myrta Dorothy Shank,

Teacher of Household Arts
Barney Shapiro, Teacher of Industrial Arts
Mary Wheaton Sherman, Teacher of Fine Arts
Marion Jay Sherwood.

Supervisor of Industrial Arts Gertrude Augusta Siebert,

Teacher of Household Arts
Grace E. Siglar, Teacher of Household Arts
Marjorie Sime, Teacher of Household Arts
Pattie Lucile Sinclair, Teacher of Mathematics
Bertha A. Sing, Teacher of Household Arts
Mildred L. Sipp, Teacher of Household Arts
Frances Hortense Smith, Teacher of History
Irene Marie Smith, Teacher of Household Arts
Elmer W. Snyder, Supervisor of Industrial Arts
Samuel S. Solender, Director of Industrial Arts
and Vocational Education

Elizabeth Adelle Spaulding,

Teacher of Household Arts Lulu Elise Stallmann, Teacher of Household Arts Louise Sophia Steinway,

Supervisor of Elementary Schools Florence H. Stewart, Dietitian Josephine E. Stull, Teacher of Household Arts Minnie Suckow, Teacher of School Music Margaret Sweet, Teacher of Household Arts Freda Virginia Syze, Teacher of Household Arts Mary Alvira Taylor, Teacher of Household Arts Florence Terry, Dietitian

Mary Scott Thayer, Supervisor of Kindergartens Charles Henry Thomas,

Teacher of Industrial Arts Stella Irene Trane, Teacher of School Music Edith Howard Tressler (Mrs.),

Supervisor of History
Sarah Louisa Treyz, Teacher of Household Arts
Edith Long Troy, Supervisor of Kindergartens
Sarah Spalding Tupper,

 ${\it Teacher\ of\ Household\ Arts}$ Georgiana Tyler,

 $Supervisor\ of\ Elementary\ Schools$ Luba Christo Tzetanova,

Supervisor of Kindergartens Emma Matilda Ueland,

Teacher of Household Arts
Lena Chew Van Bibber, Teacher of History
Gladys Van Riper, Teacher of Household Arts
Frieda Van Sickle, Teacher of Household Arts
Roy Benjamin Vaughan, Director of Industrial
Arts and Vocational Education
Katherine Allen Waller,

Teacher of Household Arts
Elizabeth Zabriskie Walser, Teacher of Hygiene

and Physical Education
Ellen Pike Watson, Teacher of Hygiene and
Physical Education

Esther Watson, Teacher of Hygiene and Physical Education

Anna R. Weber, Teacher of Fine Arts
Ethel Magdalen Weidenmaier,

Teacher of Household Arts
Anna Hunt Welles, Teacher of Fine Arts
Grace Taylor Wellwood,

Teacher of Household Arts
Mabel Elizabeth Westgate,

Teacher of Household Arts Mary N. Williams,

Supervisor of Elementary Schools

Effie May Williamson,

Supervisor in Normal Schools

Eva Wilson, Teacher of Household Arts

Departmental Certificates

Virginia M. Alexander, Drawing and Painting Slyvia L. Bayard, Teaching Household Arts Pluma M. Brown, House Design and Decoration Frances Emma Buschmann,

Teaching Household Arts
Margaret B. Craig, Teaching Fine Arts
Luella Mathilda Erion, Nursing and Health
Ellen Hillstrom, Teaching Fine Arts
Harriet Eliza Holden,

Teaching in Schools of Nursing

Fanny Reynolds Howe,

Teaching in Schools of Nursing Edith M. Kaufhold, Teaching Household Arts Grace Knight, Teaching Household Arts Charlotte Elizabeth Lamb,

Teaching Household Arts E. Caroline Sparrow,

Administration of Schools of Nursing Leslie Wentzel, Public Health Nursing

DEGREES, DIPLOMAS AND CERTIFICATES CONFERRED

A full list of names of graduates who in 1917–1918 received Columbia University degrees through Teachers College and Teachers College diplomas is included in the 'Register of Teachers College Students 1918–1919', which will be sent on application to the Secretary of the College.

SUMMARY OF DEGREES, DIPLOMAS, AND CERTIFICATES CONFERRED 1917-1918

1917 1910			
Degrees:			
	9		
Master of Arts			
	4		
Bachelor of Science	5		
Teachers College Diplomas:			
	7		
Awarded in connection with the Master of Arts degree	7		
Awarded in connection with the Bachelor of Science degree	6		
	4		
Total degrees and diplomas awarded	8		
Distribution of the Professional Diplomas:			
Distribution of the Professional Diplomas:			
Instructor in Education	7		
Teacher of Education	9		
Superintendent of Schools	.2		
Principal of High Schools	0		
Supervisor in Normal Schools	4		
Teacher in Elementary Schools	I		
Supervisor of Elementary Schools	6		
Supervisor of Trimary Schools	2		
Teacher in Primary Schools	I		
	4		
Supervisor of Kindergartens	8		
Adviser to women and onis	6		
Taychologist	8		
Supervisor of recigious Education	7		
Teacher of Rengious Education	I		
Supervisor of Poreign Behoods	2		
Dapervisor of Special Classics 1111111111111111111111111111111111	3		
Supervisor of Rufai Education	1		
Teacher of Kurai Education	I		
Teacher of Biology	3		
Teacher of English	5		

DEGREES AND DIPLOMAS CONFERRED 13
Supervisor of English
Teacher of Fine Arts
Supervisor of Fine Arts
Teacher of French
Teacher of Geography
Teacher of German
Teacher of Spanish
Teacher of History
Supervisor of History
Teacher of Household Arts
Supervisor of Household Arts
Dietitian
House Director
Teacher of Industrial Arts
Supervisor of Industrial Arts
Director of Industrial Arts and Vocational Education
Teacher of Latin
Teacher of Mathematics
Supervisor of Mathematics
Teacher of School Music
Supervisor of School Music
Teacher of Hygiene and Physical Education
Supervisor of Hygiene and Physical Education
Supervisor of Play and Playgrounds
Teacher of Scouting
Teacher of Physical Science
Supervisor of Public Health Nursing
Public Health Nurse
Superintendent of Nurses and Principal of Training Schools

*420

^{*} Includes duplicate count, 2 students candidates for more than one diploma.

FELLOWS AND SCHOLARS FOR 1918-1919

FELLOWS

Teachers College Fellows

Huber William Hurt Lebanon, Ill. B.S., Iowa Wesleyan, 1904; A.M., Iowa Wesleyan, 1905; LL.D., 1917; Graduate Scholar, Teachers College, 1917Frank Charles Touton Edgerton, Wis. Ph.D., Lawrence College, 1901; A.M., 1917; Graduate Scholar, Teachers College, 1917–

Girl Scout Fellow

Anna J. Coutts
Ontario, Canada
A.B., Trinity College, 1916

GRADUATE SCHOLARS

Research Scholars

Mary Augusta Clark Bedford, N. Y. A.B., Mount Holyoke, 1903; undergraduate scholar, Teachers College, 1903–1904; A.M., 1914

John J. Didcoct Nashville, Tenn. Ph.B., Wooster, 1905; M.S., 1908; A.M., 1914; graduate student, Teachers College, 1916-

David H. Moskowitz Brooklyn, N. Y. A.B., 1913; A.M., 1914

James William Norman Hartwell, Ga. A.B., Mercer, 1906; A.M., Harvard, 1912; graduate student, Berlin, 1912–1913; graduate research scholar, Teachers College, 1913–1914

Smiley M. Whinery Warren, Ind. A.B., Indiana, 1916; A.M., Indiana, 1917; graduate student, 1917–1918

Lester MacLean Wilson Charleston, Ill. A.B., Park College, 1906; A.M., Chicago, 1908; graduate student, Wisconsin, 1912– 1913

Graduate Scholars

Mary S. Carleton Foochow, China A.B., Goucher, 1912

Hugh Clark Pryor Boulder, Col. A.B., Colorado, 1911; A.M., Colorado, 1912; A.M., 1917

Forest Tobias Selby Oxford, O. B.S., Miami, 1915

Frederick N. Smith East Worcester, N. Y. A.B., Princeton, 1907; student, Rochester Theological Seminary, 1907–1910

Practical Arts Scholar

Grace M. Currier Salix, Ia.
A.B., Northwestern, 1911; A.M., Chicago,
1914; graduate student, Teachers College,
1917-

Livingston Scholars

Mary Frances Carpenter Cumberland, O. A.B., Mount Union, 1910

Lowry Davis Greenville, S. C. A.B., Southwestern Presbyterian, 1902; B.D., Union Theological Seminary (Va.), 1908

Catharine E. Jackson New York City Ph.B., DePauw, 1901

Mary G. Kesler Valley Center, Kan. A.B., Baker, 1910

William J. McKee Aspinwall, Pa.

C.E., Cornell, 1909 Minne Vautrin Secor, I

Iinne Vautrin Secor, Ill. A.B., University of Illinois, 1912

UNDERGRADUATE SCHOLARS

Tileston Scholar

Margaret J. Quilliard Duluth, Minn. Diploma, Duluth City Normal School, 1895; diploma, Chicago Froebel Association, 1901; student, Teachers College, 1917-

Pond Scholar

Arous Hovanes Azadian Smyrna, Asia Minor Diploma, Armenian National School, 1903; kindergarten diploma, Adelphi College, 1917; student, Teachers College, 1917–

Hoadley Scholar

Blanche Jennings Thompson Geneseo, N. Y. Diploma, Geneseo State Normal, 1906

Livingston Scholar

Grace Ellison Superior, Neb. Student-Central Holiness University, 1907-1910; A.B., Taylor, 1911

Runyan Scholar

Ilien J. Tang Nanchang, China Ph.B., Wesleyan College, 1906

Margaret Hoe Scholar

Jane Elizabeth Joslin Camden, N. Y. Certificate, Buffalo State Normal School, 1909

Helen Hartley Jenkins Scholar

Helen M. Zurawski Burlington, Ia. Diploma, Johns Hopkins Hospital School for Nurses, 1913

Army and Navy Scholar

Donna Margaret Drew Highland Park, Ill. Diploma, Lewis Institute, 1913

Undergraduate Scholars

Laura Frazee Indianapolis, Ind. Diploma, Indiana State Normal, 1892; student, Stamford, 1906-1907; Chicago, 1909-1910

Gretchen Garst Fairfield, Ia. Diploma, Drake, 1911; student, Teachers College, 1917-

Elizabeth Jenkins Cincinnati, O. Diploma, Oswego State Normal, 1893; diploma, Chicago Kindergarten Institute, 1903

Caroline Scholars

Frances Maud McNally

Fredericton, N. B., Canada Certificate, Fredericton, N. B., Normal School, 1893; diploma, Macdonald Institute, Ontario Agricultural College, 1914

New York City Pauline Needham Student, Denver University, 1905-1907

Practical Arts Scholars

Ellen Bywater Cambridge, Mass. Student, Bryant and Stratton Commercial College, 1908-1909

Adelaide L. Carlock Hasbrouck Heights, N. J. Student, Wellesley College, 1915-1916; Teachers College, 1916-

Lydia Clark

Andover, Mass. Diploma, Abbott Academy, 1906; diploma, Boston Normal School of Gymnastics, 1908; student, Wellesley, 1913-1917

Frances Minor Dowd Madison, Conn. Student, Teachers College, 1916-

Sarah Louise Lewis Corvallis, Ore. Diploma, Teachers College, 1912

Beulah Judith Marker Los Angeles, Cal. Diplomas, Los Angeles State Normal, 1916, 1917; student, Teachers College, 1917-

Mirdyaleen Maxwell Minneapolis, Minn. B.S., College of Agriculture, University of Minnesota, 1914

Mary Noble Glenside, Pa. Student, Teachers College, 1916-

Dorothy North Upper Montclair, N. J. Student, Teachers College, 1916-; Practical Arts Scholar, 1917-1918

Mary E. Simons Swarthmore, Pa. Student, Drexel Institute, 1915-1917

Edith Estelle Swan Newark, N. J. Student, Teachers College, 1916-

Sarah V. H. Tompkins Jersey City, N. J. Diploma, Jersey City Training School, 1910; student, Teachers College, 1917-

Helen Curtis Townsend Mount Vernon, N. Y. Student, Connecticut College for Women, 1015-1017: Teachers College, 1017-

Frances Elizabeth Watts Glen Ridge, N. J. Student, Teachers College, 1915-; Practical Arts Scholar, 1917-1918

FOREIGN SCHOLARS

Steingrimur Arason Reykjavik, Iceland Student, Teachers College, 1916-

Yervant Hetoom Basmadjian

Bardizag, Armenia B.S., Princeton, 1916; A.M., Chicago, 1918

Harpoot, Armenia Aroos Benneyan Student, Damrosch Institute of Music, 1916-1917; Teachers College, 1917-

Waiha Chung Canton, China Diploma, Canton Christian College, 1913; student, Teachers College, 1916Tokyo, Japan

Ai Hoshino

A.B, Bryn Mawr, 1912

Kiku Ishihara Tokyo, Japan Student, Cincinnati Kindergarten Training School, 1906–1908; Tokyo Kindergarten Normal School, 1909–1911; Teachers College, 1917–

Rhoda Kong Canton, China

A.B., Wheaton, 1918

Zarobi D. Mesrobian Sivas, Turkey Diploma, National School of Sivas, Turkey, 1909; diploma, Kindergarten Training School, 1916; student, Teachers College, 1916Takeo Minami Tokyo, Japan Diploma, High Normal College, Tokyo, Japan, 1916; student, Teachers College, 1917—

Luis A. Tirapequi Santiago, Chile Student, Institute Pedagogier, Chile, 1914– 1917; B.S., Teachers College, 1918

Choming Tsai Peking, China A.B., Miami, 1917; A.M., Ohio State, 1918

Tomi Wada Chofu, Yamaguchi, Japan Diploma, Women's University of Tokyo, Japan, 1917; student, Teachers College, 1917—

ASSISTING SCHOLARS

Ethel Austin Nutrition
Student, South Dakota State Normal, 19121916

Sarah Best Household Administration
A.B., University of Minnesota, 1905; B.S.,
1914

Esther Bracken Nutrition
Diploma, Battle Creek Sanitarium School of
Home Economics, 1918

Eleanor Chew Foods and Cookery
Student, Teachers Colege, 1915-

Mary Goodell Institutional Administration
Diploma, Syracuse University, 1906; student, Teachers College, 1916-

Anna Grimes Ayden, N. C. Student, East Carolina Teachers Training School, 1910–1912

Edith Hawley Practical Science Diploma, California State Normal, 1915; student, Teachers College, 1917-

Albert W. Heckman Fine Arts
Student, Teachers College, 1916-

Henriette Pribnow

Foods, Nutrition, and Sanitation Diploma, Boston School of Domestic Science, 1910; student, Teachers College, 1916–

Edna Randall Foods and Cookery
Diploma, Milwaukee State Normal, 1901;
diploma, Stout Institute, 1911; student,
Teachers College, 1916-

Joan Rock Foods and Cookery Student, Teachers College, 1916-

Clyde B. Schuman Household Arts Special diploma, Teachers College, 1911; student, 1917-

Beatrice Shaw Physical Education Diploma, Savage School of Physical Education, 1916; student, Teachers College, 1916– Hazel Stiebling

Foods, Nutrition, and Sanitation Diploma, Skidmore, 1915; student, Teachers College, 1916–

Isabel W. Strong Hamilton, Canada Diploma, Macdonald Institute, 1904

REGISTER OF STUDENTS

1918-1919

TEACHERS COLLEGE

Candidates for the Master of Arts degree, Master of Science degree, Doctor of Philosophy degree, Teachers College professional diplomas or unclassified graduate students

The following students are registered under the Faculties of Education or Practical Arts. The special departments of major interest are given in italics. Minor courses not in Education are also given in italics.

Officers in the University who are at the same time pursuing courses for the higher degrees are not included in this list. Wherever the name of a State is given after a degree, it signifies that the student has graduated from the given State University.

GRADUATE STUDENTS-1918-1919	Bangs, Mollie Louise Lansing, Mich.
Abell, Katherine Fullagar Dunkirk, N. Y.	A.B., Michigan, 1908. Religious Education
B.S., 1918	Barber, Catharine East Cleveland, Ohio
Albrecht, L. Dorothy Los Angeles, Cal.	A.B., Western Reserve, 1917. Religious Ed-
A.M., 1918, A.B., Stanford, 1916. Educa-	ucation
tional Psychology	Barnes, Bertie Ford Lynchburg, Va.
Alexander, Edith Eaton Logansport, Ind.	B.S., 1918
A.B., Indiana, 1906. Mathematics	Barnes, Percival Simpson Mt. Vernon, N. Y.
Allen, Bernice Chicago, Ill.	A.M., 1918; B.S., 1917
B.S., Chicago, 1909. Household Arts	Barnewall, Eva Aylmer New York City
Allen, Lula Myra Plattsburg, N. Y.	A.B., Hunter, 1914
A.B., Smith, 1916	Barnewall, Marie Aylmer New York City
Anderson, Grace M. Brooklyn, N. Y.	A.B., Hunter, 1912. English
B.S., 1916	Barrus, Lena Wakefield Lithia, Mass.
Anger, Gertrude New York City	B.S., 1915. Household Arts
A.B., Hunter, 1918	Bartholmeu, Albert John Summit, N. J.
Apgar, Nellie Jacobus Westfield, N. J.	A.B., Colgate, 1916
B.S., 1913	Barto, Harriet Thompson Urbana, Ill.
Ashraf, Ghodsea Marion Teheran, Persia	A.M., 1917; A.B., Illinois, 1916. Chemistry
A.M., 1918; B.L., Boston, 1917	Baruch, Bernard Brooklyn, N. Y.
Atterbury, Marguerite New York City	B.S., C. C. N. Y., 1913. Science
A.B., Wellesley, 1918. English	Bash, Mary Iola Seattle, Wash.
Atwood, Evelyn Estelle Springfield, Mass.	A.B., Washington, 1914
B.S., 1918	Basmadjian, Yervant Hetoom, New York City
Atwood, Ina Clayton Brooklyn, N. Y.	A.M., Chicago, 1918; B.S., Princeton,
A.M., Radcliffe, 1911; A.B., Mt. Holyoke,	1916
1904	Bass, Agnes Naumburg (Mrs.) New York City
Aucamp, Anna Jacoba	A.B., Vassar, 1909
Graspau, Kimberley, So. Africa	Becker, Charlotte W. New York City
A.B., Cape Town, South Africa, 1915.	A.B., Hunter, 1916
Educational Philosophy	Becker, Margaret C. Leonia, N. J.
Avery, Edna Irene Tacoma, Wash.	B.S., 1916. Household Arts
B.S., 1913; A.M., 1914	Beckers, Caroline Anna Hoboken, N. J.
Babcock, George Warren Hackensack, N. J.	B.S., 1917
A.B., Brown, 1909	Beem, Lena Margaret Richwood, Ohio
Bachrach, Flora' New York City	Ph.B., Adrian, 1909. History
A.B., Hunter, 1916. Psychology	Belting, Paul Everett New York City
Baker, Margaret M. Nevada, Iowa	A.M., 1918; A.B., Illinois, 1912. Educa-
Babcock, George Warren Hackensack, N. J. A.B., Brown, 1909 Bachrach, Flora New York City A.B., Hunter, 1916. Psychology	B.S., 1917 Beem, Lena Margaret Richwood, Ohio Ph.B., Adrian, 1909. <i>History</i> Belting, Paul Everett New York City

tional Administration

B.S., Iowa, 1910. Household Administration

Becktell Betty Belle Macksville, Kan. A.B., Kansas, 1914. Household Administration Benedict, Marion Josephine North Tarrytown, N. Y. A.B., 1919. English Bennett, Mabel Lilian Plainfield, N. J. A.M., Cornell, 1910 Bennett, Thomas Gordon St. Leonard, Md. A.B., Western Maryland, 1909. Educational Administration Benson, Doris Evelyn Lynbrook, N. Y. A.B., Elmira, 1915 Bere, May Winnipeg, Manitoba, Canada A.B., Manitoba 1915; A.M., Chicago, 1917 Bergman, Morris L. New York City B.S., C. C. N. Y., 1909. Mathematics Bersohn, Robert Brooklyn, N. Y. A.M., 1914; B.S., C. C. N. Y., 1911 Best, Sarah Fargo, N. D. B.S., 1914; A.B., Minnesota, 1905. Household Administration Bickelhaupt, Helen Harrison (Mrs.) LaCrosse, Wis. A.B., Wisconsin, 1914. Physical Education Bielby, Katharine S. Middletown, Conn. A.B., Wesleyan, 1911 Billig, Florence Grace New York City B.S., Chicago, 1915. Biology Berch, Blanche Louise New York City A.M., 1918; A.B., Wellesley, 1902 Birdsong, Nellie Warren Indianapolis, Ind. B.S., 1911 Bjelke, John Leander Yonkers, N. Y. Secondary Education Ph.B., Denison, 1916. Blackford, Katharine Newark, N. J. Ph.B., Rochester, 1908 Blackwood, Ethel New York City A.B., Hunter, 1918 Blauvelt, Anna L. New York City A.M., 1917; B.S., 1915. Industrial Arts Bliven, Rose Emery New York City A.B., California, 1914. Kindergarten Blumenthal, Frances New York City A.M., 1916; B.S., 1915. Educational Psychology Stillwater, Minn. Bohrer, Rosalia B.L., Wisconsin, 1896 Passaic, N. J. Bonnard, Annette Young A.B., N. Y. U., 1913; A.M., N. Y. U., 1915 Mamaroneck, N. Y. Boothby, Arthur Z. B.S., 1916. Elementary Education Borton, William Franklin White Plains, N. Y. B.S., Illinois, 1902 Bosworth, Katherine H. T. New York City A.B., Hunter, 1907

Bosworth, M. Blanche

B.S. 1915. Kindergarten Supervision

Bowen, Kenneth Blount Belhaven, N. C. A.M., Transylvania, 1918; B.D., 1917. Religious Education Bowers, Wilson Randolph East Radford, Va. A.B., Milligan, 1915; A.M., Virginia, 1907; B.S., Milligan, 1900. Mathematics Bradley, Harold H. Montclair, N. J. B.S., Princeton, 1904. Mathematics Brandstadter, Simon New York City B.S., C. C. N. Y., 1914. Physics Bready, John Wesley North Battleford, Saskatchewan, Canada A.M., 1917; A.B., Queens, 1913; B.D., Union Theological, 1917; B.D., Toronto, 1916. Sociology Bressler, Calder Blaine Minneapolis, Minn. A.B., Minnesota, 1916 Brim, Orville Gilbert Latchie, Ohio A.M., 1911; B.S., Valparaiso, 1907 Bristol, Raymond M. Riverside, Conn. A.B., Amherst, 1911. Elementary Education Bristol, Ruth Louise New York City B.S., 1917 Brockett, Elisabeth Gault East Orange, N. J. A.M., 1918; A.B., Holyoke, 1917 Bromley, Anna Orr Uniontown, Pa. A.M., 1915; B.S., Carnegie Inst. of Tech., 1914 Bross, William Hamilton Brooklyn, N. Y. A.B., Colgate, 1916 Brown, Richard Burgess Troy, Tenn. B.S., Peabody, 1917. Educational Psychology Browning, Webster E. Montevideo, Uruguay Ph.D., Emporia, 1895; A.B., Princeton, 1894. Education Brubaker, Ethel Rahway, N. J. A.B., Oberlin, 1911 Bucks, Olive Aurora, Ill. A.B., Michigan, 1908. History Burke, Agnes Winona, Minn. B.S., 1913 New York City Burke, Emma Jane B.S., 1916. English Burnham, Elsie Isabel Plainview, Minn. B.L., Carleton, 1905 Burns, Dana Thurlow Guysville, Ohio A.B., Ohio, 1917. Secondary Education Guysville, Ohio Burns, Marie C. B.S., Ohio, 1917. Secondary Education Cliffside, N. J. Burns, Robert Leo B.S., 1916. Elementary Education Burton, Elizabeth Ashley Gloversville, N. Y. A.B., Smith, 1918. Nursing Burtt, Jerome Brooklyn, N. Y. Ph.B., Yale, 1914. Mathematics Byrne, Margaret C. Brooklyn, N. Y. Mathematics

A.M., 1908; A.B., 1905.

B.S., C. C. N. Y., 1892. Mathematics

Byrne, George L.

New York City

New York City

Campbell, Hattie Louise Windsor, Conn. A.B., Mt. Holyoke, 1903. Nutrition

Carleton, Mary Sing-Gien Foo Chow, China A.B., Goucher, 1912

Carlton, Josephine Buffalo, N. Y. A.B., Lake Erie, 1916. English

Carpenter, Mary Frances Cumberland, Ohio A.B., Mt. Union, 1910. Elementary Education

Carroll, Cleome Eugene, Ore. A.B., Oregon, 1918. Fine Arts

Carson, Clara Louise Yonkers, N. Y. Ph.M., Syracuse, 1909; Ph.B., Syracuse, 1906

Carter, Esther May Cuyahoga Falls, Ohio A.M., Ohio Wesleyan, 1906; B.L., 1892

Case, Adelaide Teague
A.B., Bryn Mawr, 1908.
Caulkins, Glenn Whitman
Religious Education
Bellingham, Wash.

A.B., Washington, 1901

Chamberlain, Nina Lenita Sparkill, N. Y. B.S., 1918

Chandler, Robert Elmer New York City A.M., Yale, 1910; B.D., Yale, 1910; A.B., Yale, 1904

Chang, Sze-yi Shingtseh, China B.S., 1918. Educational Psychology

Chang, Zah-Ling Shanghai, China A.M., 1918; A.B., St. John's, 1917

Chaplin, Maude Frances Rock Hill, S. C. B.S.. 1917; A.B., Winthrop, 1899. House-hold Arts

Chapman, Ardenia Keytesville, Mo. B.S., Missouri, 1917. Household Arts

Chapman, Hazel New York City A.B., Rochester, 1910

Cherey, Deborah New York City A.B., Hunter, 1916. Fine Arts

Chipkin, Israel Solomon New York City A.M., 1915; B.S., 1913. Educational So-

ciology Chipman, Guy Wilbur Brooklyn, N. Y. A.B., Colby 1902; A.M., Pennsylvania, 1913

Christianson, Erica Menomonie, Wis. B.S., 1907. Household Arts Education

Clark, Austin Gilbert New York City A.B., C. C. N. Y., 1903. *History*

Clark, Bertha Winifred Hamilton, N. Y. A.M., 1915; A.B., George Washington, 1902

Clark, Edward Maurice Eden Prairie, Minn. B.D., San Francisco Seminary, 1918; A.B. Macalester, 1915

Clark, Marion G. Newark, N. J. B.S., 1916. History

Clark, Mary Augusta Bedford, N. Y. A.M., 1914; A.B., Mt. Holyoke, 1902. Educational Psychology

Cobb, Edna Isabelle Scranton, Pa. A.B., Wilson, 1913. Household Arts

Cobb, Margaret Evertson Tarrytown, N. Y. A.M., 1918; A.B., Vassar, 1917. Psychology Coburn, Mildred Leann McLean, Ill. A.B., Illinois. Mathematics

Coe, Isabel Louise Brooklyn, N. Y. A.B., Hunter, 1918. *Mathematics*

Cohen, Frank Brooklyn, N. Y. A.M., 1916; A.B., C. C. N. Y., 1915. Educational Sociology

Collins, Albert Valentine New York City A.B., Boston, 1907. Educational Administration

Collins, Katherine Mildred (Mrs.) New York City A.B., Hunter, 1916. Science

Conkling, Roscoe Peter Brockport, N. Y. A.B., Cornell, 1911

Consalus, Frances Hamilton New York City B.S., 1908

Cook, Sherman Robley New York City B.S., 1918

Cooledge, Dorothy Cedar Falls, Ia. A.B., Iowa, 1918. Kindergarten

Coonrod, Mildred Esther Port Jervis, N. Y. Ph.B., Syracuse, 1911. History

Corson, Guy Louis Hop Bottom, Pa.
A.B., Syracuse, 1914. Secondary Education
Coulter, John Harvey Greenwich, Conn.

Ph.B., Syracuse, 1910 Coulton, Thomas Evans

Coulton, Thomas Evans Red Bank, N. J. A.B., C. C. N. Y., 1914

Coutts, Anna Juanita

Thamesville, Ontario, Canada A.B., Trinity, 1916. Scouting

Cox, Theodosia Winchester, Va. A.B., Vassar, 1916

Crabtree, Rebekah Taylor San Diego, Cal. A.B., Stanford, 1918

Crane, J. Ernest Orange, N. J. A.M., N. Y. U., 1918; Ph.B., Dickinson, 1911 Crim, Adelaide Far Rockaway, N. Y. Ph.B., Syracuse, 1908

Crogan, Ida Christine Bayonne, N. J. A.B., Minnesota, 1906. English

Crogan, Mattie Marie Bayonne, N. J. A.B., Minnesota, 1910. English

Crouse, Walter Suplee Honeybrook, Pa. A.M., 1918; Ph.B., Bucknell, 1915

Currier, Grace Mae Salix, Ia.
A.M., Chicago, 1914; A.B., Northwestern,

1911. Household Arts
Currier, Mildred Monmouth, Ill.

A.B., Monmouth, 1915. Physical Education
Danes, James Thomas Brewster, N. Y.
B.S., Syracuse, 1913. Educational Administration

Darrow, Alice Marie New York City A.B., Michigan, 1914. Mathematics

Davenport, Isabel New York City A.M., 1909; B.S., 1902

22 Davis, Bertha Corvallis, Ore. M.S., Oregon State Agricultural, 1909. Household Arts Education Davis, Carrie Hays Wichita, Kan. A.B., Friends, 1917 Davis, Lowry Greenville, S. C. B.D., Union Theological (Va.), 1908; A.B., Southwestern Presbyterian, 1902. Missionary Education Davis, Margaret Stanley Glens Falls, N. Y. B.S., Simmons, 1911 Davis, Merle Leonard Wichita, Kan. A.B., Friends Univ., 1917. Religious Education Dayan, Marion Brooklyn, N. Y. B.S., Elmira, 1916; A.B., Elmira, 1916. Biology Dayton, Margaret Irene Schenectady, N. Y. A.B., New York State College for Teachers, 1915. French Beaufort, West South Africa Deas, Sarah A.B., Huguenot, 1903. Administration Deaver, Mary Lenore Crooksville, Ohio B.S., Ohio, 1918. History Debower, Rae New York City A.B., Hunter, 1914. Philosophy Denny, Grace Goldena Seattle, Wash. A.B., Nebraska, 1907. Household Arts Dennett, Edith Evans Berkeley, Cal. B.L., California, 1914 Dennis, Edna Elston Newburgh, N. Y. A.B., Elmira, 1914. Latin Detraz, Mary Julia New York City A.B., Cincinnati, 1910. Elementary Education DeZeller, May Pearl New York City B.S., 1917. Mathematics Dexter, Walter Friar New York City A.B., Pennsylvania, 1916. Religious Education Didcoct, John Joseph Nashville, Tenn. A.M., 1914; M.S., Wooster, 1908; Ph.B., Wooster, 1905. Secondary Education Diehl, Eleanor Catharine Port Chester, N. Y. B.S., 1917. Household Arts Diemer, Magdaleen Cathrina Pontiac, Ill. Ph.B., Chicago, 1916. History Dobbin, Benjamin Harrison, Port Chester, N.Y. Pd.M., N. Y. U., 1916; B.S., N. Y. U., 1915. Educational Administration Dodd, Nellie Carter New York City A.B., Mt. Holyoke, 1912. Industrial Arts Doherty, Mary New York City A.M., 1914; B.S., 1912 Doran, Edmund W. Newport, Ky. A.B., New Mexico, 1914 Doremus, Mary Caroline Kingston, N. Y.

A.M., Washington, 1914; A.B., Albany, 1908

A.B., Adelphi, 1916. Elementary Education

Brooklyn, N. Y.

English

Doris, Charles

Dow, Harold Francis Hackensack, N. J. B.S., Colby, 1910 Drum, Edith Leonard (Mrs.) B.S., 1915. Grantwood, N. J. Drum, Warren Nevin Grantwood, N. J. A.M., 1915; B.S., 1914. Educational Administration Dudley, Warren Spencer Indianola, Ia. B.D., Garret, 1917; A.B., Simpson, 1914. Religious Education Duncan, Bertha Chandler Hancock, N. H. A.B., Middlebury, 1905. English Winnipeg, Canada Duncan, David Merritt A.B., Toronto, 1894; Pd.B., Toronto, 1895 Dunphy, Mary St. Paul, Minn. B.S., Minnesota, 1915. Institutional Administration Durfee, Ruth Mott Salem, N. Y. Ph.B., Vermont, 1914. French Duryea, Madeline S. New York City B.S., 1916 Eames, Susan Frances Jacksonville, Ill. A.B., Illinois, 1907. Kindergarten Ebbert, Lida Mildred Barberton, Ohio Ph.B., Dickinson, 1908. Administration Eckman, Rena Sara Leechburg, Pa. B.S., 1918. Administration Eckstein, Arthur C. New York City B.S., C. C. N.Y., 1903; A.M., N. Y. U., 1908 Edmond, Sarah Cohocton, N. Y. B.S., N. Y. U., 1008 Elliott, Lucy Cable Columbus, Ohio B.S., 1914; A.B., Mt. Holyoke, 1904. Educational Psychology Ellis, Dorothy Grace Kellogg, Idaho B.S., Idaho, 1915. Institutional Administration Ely, Dorothy Olivet, Mich. A.B., Olivet, 1913. Mathematics Emmons, Frederick Earle Elizabeth, N. J. A.B., Cornell, 1902 Erdwurm, Joanna New York City A.B., Hunter, 1918. History Errickson, Erma Olga Virgil, Kan. A.B., Washburn, 1917 Etkin, Murray Jonathan New York City B.S., C. C. N. Y., 1918 Everett, Sarah Ruth Roselle Park, N. J. A.B., Boston, 1911. Physical Science Fairchild, Alice Cowles Nashville, Tenn. B.S., 1913; A.B., Oberlin, 1912. Household Arts Farrar, Nell Hillsboro, Tenn. A.B., 1918. Administration Farrell, Margaret Marie New York City A.B., Mt. St. Vincent, 1914 Faulkner, Elizabeth Springfield, Mo. B.S., Missouri, 1907; A.B., Missouri, 1907.

Fearon, Dora Christina Ann Arbor, Mich. Gaffney, Matthew Page Webster, N. Y. A.B., Michigan, 1909 B.S., Colgate, 1912. Educational Sociology Fernalld, Floyd Monroe Leonia, N. J. Gammon, Stella Marcia Pasadena, Cal. A.B., Syracuse, 1905. Mathematics A.B., Pomona, 1917. Fine Arts Fedde, Margaret Omaha, Neb. Gamoran, Emanuel New York City A.B., Nebraska, 1914 A.B., C. C. N. Y., 1917 Fenili, Raphael Astoria, L. I. Gardner, Eleanor Adelaide Nyack, N. Y. A.M., 1916; Ph.B., Liceo (Italy), 1900 Pd.M., N. Y. U., 1917; A.B., South Caro-Fenninger, William Norman lina, 1916 Richmond Hill, N. Y. Garrison, Noble Lee New York City A.M., Ohio State, 1913; Ph.B., Franklin A.M., Missouri, 1912; A.B., Missouri, 1912; B.S., Missouri, 1909. Elementary Adminisand Marshall, 1910 Ferrin, Livia E. tration Montclair, N. J. A.M., 1915; A.B., Pacific, 1906 Gauthey, Fanchette L. New York City Field, Eleanore Anne Hartford, Conn. A.M., N. Y. U., 1901 B.S., 1915. Educational Administration Gaylord, Viola G. Lyons Falls, N. Y. Fiero, Maude Louise Round Top, N. Y. A.B., Keuka, 1914 B.S., 1912 Giddings, Anne B. Mineola, N. Y. Fisher, Harry Martin Port Chester, N. Y. A.B., Syracuse, 1915. English B.S., N. Y. State, 1916 Gildemeister, Theda Winona, Minn. B.S., 1906. Elementary Supervision Fisher, Henry Earl Clearfield, Pa. A.B., Pennsylvania Coll., 1917. Religious Gilmore, Ethel Melinda New York City Education A.M., 1918; A.B., Hunter, 1915. Fine Arts Flores, Pastoriza New York City Gillum, Helen Louise Terre Haute, Ind. A.B., Hunter, 1919. History A.B., Indiana, 1915. Administration Fontarede, Bertha A. Ridgewood, N. J. Goble, Lottie Maude Newark, N. J. B.S., N. Y. U., 1917. A.B., Vassar, 1905. Mathematics Foote, Alice Bradford Cincinnati, Ohio Godshaw, Esther Cincinnati, Ohio B.S., 1913. Household Arts Education B.S., Chicago, 1909; Ph.B., Chicago, 1909. Forsyth, Margaret E. Germantown, Pa. History A.B., Goucher, 1917 Goff, Margaret Dorothy Madison, S. D. Forsyth, Pearl Barnett A.B., South Dakota, 1917. Physical Edu-Indianapolis, Ind. A.B., Butler, 1908 cation New York City Foster, Eleanor Worthington Troy, N. Y. Goldberg, Edward A.B., Stanford, 1917 A.B., Vassar, 1918. Religious Education Fowler, Mabel Montrose, Pa. Goldsmith, Claire Elizabeth New York City B.S., 1017. Kindergarten Supervision Ph.B., Syracuse, 1907 Goll, Bertha Clemence Fowler, Matilda Newson (Mrs.) Berkeley, Cal. Brooklyn, N. Y. B.S., California, 1913 B.S., 1915. English Salem. Ore. Frame, Margaret Anna Tengchowfu, China Goltra, Inez Janet A.B., Reed, 1916. Kindergarten A.M., 1910; Ph.B., Wooster, 1905 Franklin, Cirrelda New York City Goodsell, Evelyn Dora Flandreau, S. D. Ph.B., Chicago, 1918; B.M., Christian Coll., Music A.B., Carleton, 1916. 1916. History Gordy, Harry Miles Elizabeth, N. J. Friedrich, Charles Henry S. Leonia, N. J. A.B., Wesleyan, 1907 A.M., 1916; B.S., 1914. Administration Goucher, Elizabeth Pikesville, Md. Fritz, Henry Eugene North Pelham, N. Y. A.B., Goucher, 1905 B.S., N. Y. U., 1906; Ph.D., N. Y. U., 1908; Graham, Marion Jordan New York City Pd.M., N. Y. U., 1907 A.B., Hunter, 1918. Mathematics Froats, Willis Charles Ontario, Canada Grant, James Richard Fayetteville, Ark. A.M., Chicago, 1914; Ph.B., Illinois, 1911; A.M., Queen's, 1904; A.B., Queen's, 1903 A.B., Arkansas, 1908. Rural Education Frost, Harold Ionel Rehoboth, Mass. B.D., Hartford Theological, 1910; A.B., Graves, Katharine Bradford, Philadelphia, Pa. Bates, 1907. Religious Education A.B., Vassar, 1917; B.S., Pennsylvania, Berea, Ky. 1916. Educational Psychology Frost, Norman Gray, Frances Mahwah, N. J. A.M., 1914; A.B., Oberlin, 1909. Adminis-

A.B., Wellesley, 1912

A.B., Bates, 1915. History

East Orange, N. J.

Greenan, John Thomas

Evanston, Ill.

tration

Fulcher, Gwyneth Mary

B.S., Northwestern, 1918

B.L., Michigan, 1900

Greenberg, Elsa New York City Hartman, Gertrude New York City A.B., Hunter, 1915 A.B., Bryn Mawr, 1905. Philosophy of Edu-Greenberg, Joseph Brooklyn, N. Y. cation B.S., C. C. N. Y., 1914 Shelbyville, Ill. Harwood, Hazel May Greenfield, Solomon Charles Brooklyn, N. Y. A.B., Illinois, 1908. Adviser of Women B.S., C. C. N. Y., 1917. Mathematics Hatch, Roy Winthrop Princeton Depot, Mass. New York City Greig, Mary A.B., Dartmouth, 1902. History B.S., 1918. English Hawthorne, Marion Olive Syracuse, N. Y. Griffith, Arthur Vincent, Port Washington, N.Y. A.B., Syracuse, 1918. Social and Religious B.S., Pd.B., Syracuse, 1911 Education Groenewold, Ella Hedden, Frances Matilda Hastings, Neb. Newark, N. J. Ph.B., Chicago, 1916. Household Arts A.B., Vassar, 1904. Religious Education Grof, Christina Ossining, N. Y. Hedges, Blanche B. New York City A.B., 1914. Household Administration A.B., Vassar, 1902. Mathematics Gross, James Heilman Summit, N. J. Heim, Raymond Walter New York City A.M., 1918; A.B., Pennsylvania Coll., B.S., State College, 1913 Heinmiller, Louis Edward Glen Ridge, N. J. 1913. Gross, Olive Agusta Baltimore, Md. A.M., 1918, B.S., Rochester, 1911. Admin-A.B., Goucher, 1915. Household Adminisistration tration Hellyar, Marian Palmer, Mass. A.B., Mt. Holyoke, 1906 Grossman, Gladys Freda Brooklyn, N. Y. A.B., Adelphi, 1916. Fine Arts Herrmann, Ida Frances Bristol, R. I. Ph.B., Brown, 1906. English Grover, Elbridge Cook Closter, N. J. B.S., Harvard, 1915. Educational Adminis-Herrold, Rose Ella Nelsonville, Ohio tration A.B., Ohio, 1915. Physical Science Groves, Pauline T. Champaign, Ill. Herr, Louis Albert Fortville, Ind. A.B., Illinois, 1911 B.S., 1917. Industrial Arts Guenther, Ruth Ida Mansfield, Ohio Hersey, Louise Moore Poughkeepsie, N. Y. B.S., Ohio, 1914. Nutrition A.B., Albany, 1909; Ph.B., Albany, 1901 Guinee, Julia Frances New York City Hertzler, Silas Denbigh, Va. A.M., 1918; A.B., Hunter, 1917. Physical A.M., 1918; B.D., Yale, 1917; A.B., Goshen, Science 1913. Religious Education Guinee, Marie Loretta New York City Hess, Georgiana (Mrs.) Chicago, Ill. " A.M., 1918; A.B., Hunter, 1917. Mathe-A.B., Stanford, 1908 matics Hester, Byron Mayfield, Ky. Gustafson, Floyd Williams New York City A.B., Transylvania, 1913; A.B., West Ken-A.B., Grinnell, 1912 tucky, 1917. Religious Education Gwinn, Kathryn Maude Noblesville, Ind. New York City Hiesel, Josephine A.B., De Pauw, 1914 A.M., 1917; B.S., 1915. History Haines, Faith Huntington Higaski, Nobutaka Tokai New York City Colorado Springs, Col. A.B., Waseda (Japan), 1908. Educational A.B., Colorado, 1909 Psychology Halloran, William Frederick Elizabeth, N. J. Higgins, Kathleen Agnes New York City A.M., 1916; B.S., 1914 A.B., Hunter, 1918. English Hamilton, Frederic Rutherford Lawrence, Kan. Hill, Margaret Agnes New York City Ph.M., Wisconsin, 1907; Ph.B., Wisconsin, A.B., Adelphi, 1918 1906 Hine, Sarah Avery Staten Island, N. Y. Hanley, Frances Lee New York City B.S., Missouri, 1911 M.S., N. Y. U., 1915; A.B., Hunter, 1902 Hiramoto, Nasaji Tokyo, Japan New York City Hannum, Robert Henry B.S., 1918; A.B., Senshu Univ., 1904. A.M., Wooster, 1918; A.B., Wooster, 1915 Fine Arts Hardie, Mary E. Hackensack, N. J. Hoefer, Carolyn Freeport, Ill. A.B., Bates, 1909. Physical Science A.M., Chicago, 1918; A.B., Wisconsin, 1910. Harris, Herman Lee Colburn, Va. A.B., William and Mary, 1915 Educational Administration Harrison, Emily Stewart Atlanta, Ga. Hoffman, Esther New York City A.M., Georgia, 1918; Ph.B., Chicago, 1915 A.B., Hunter, 1915 Holmes, Margaret Hamerik New York City Hart, Louise Gibbs New York City

A.M., 1918; B.S., 1915. Psychology

Norfolk, Va. Jetteur, Matthieu Holt, Henry Daniel Verviers, Belgium B.S., Virginia Polytechnic Inst., 1911; B.D., A.M., 1918 Yale, 1918. Administration Job, Martha ·Mt. View, Cal. Honeywell, Hannah Elizabeth Walton, N. Y. A.M., Stanford, 1916; A.B., Stanford, 1915 Mt. Pleasant, Utah A.M., 1918; A.B., Mt. Holyoke, 1910 Johns, Charles Lee Hopkins, Thomas Wells Elizabeth, N. J. A.B., Northwestern, 1908 B.S., 1916. Elementary Supervision Jones, Chandler Tracy Montclair, N. J. Horowitz, Harry New York City A.B., Amherst, 1917 A.B., 1918. Latin Johnson, Elmer Wilson Roselle, N. J. Hoshino, Ai Tokyo, Japan A.B., Colgate, 1907. English A.B., Bryn Mawr, 1912. English Johnson, L. Constance Appleton, Wis. A.B., Lawrence, 1918 Houseman, William Lynn White Plains, N. Y. Jones, Chandler Tracy B.S., Colgate, 1908. Administration of Edu-Montclair, N. J. cation A.B., Amherst, 1917 Howard, David Kivett Newark, N. J. Jones, Clara V. Henry, Ill. B.S., Alfred, 1913. A.B., Oberlin, 1904 Hoyt, Olive Sawyer East Orange, N. J. Jones, Lydia Beulah Independence B.S., Mt. Holyoke, 1897 Poultney, Vt. Wuchang, China Hu, Thomas Ching-Sen Ph.B., Cornell, 1900. Adviser of Women B.S., Boone, 1915. Educational Psychology Jordan, Arthur Mellville New York City Hubbard, Julia Mary Detroit, Mich. A.M., Trinity, 1909; A.B., Randolph-Macon, 1907. Psychology B.S., 1917; B.Pd., Michigan State, 1911 Hudelson, Earl Leonia, N. J. Joyce, Emily Parry Swarthmore, Pa. A.M., Indiana, 1912; A.B., Indiana, 1911 A.B., Swarthmore, 1917. English Brooklyn, N. Y. Kaps, Clara E. Huneke, John Jacob Oshkosh, Wis. B.S., 1915. Elementary Education A.B., Adelphi, 1918 Hemlock, Ohio Kattmann, Emmy Harriet Montgomery, N. Y. Hupp, James Lloyd B.S., Ohio, 1916. Administration A.B., Hunter, 1915 Hupper, Marjorie Alden Tenants Harbor, Me. Kennard, Ralph Brandreth Tarrytown, N. Y. A.B., Mt. Holyoke, 1917. Nutrition Ch.E., 1016 Hurt, Huber William New York City Kennedy, Erskine W. Sharon, S. C. A.B., Erskine, 1905 LL.D., Iowa Wesleyan, 1917; A.M., Iowa Baker, Ore. Wesleyan, 1905; B.S., Iowa Wesleyan, 1904. Kennon, Laura Hall Administration A.B., Oregon, 1911 Hutchison, Josephine Ladner Kent, Anson Earle Inwood, L. I. Mineral Points, Wis. A.B., Syracuse, 1909. Mathematics A.M., 1918; A.B., Illinois, 1917. Physical Kent, Elizabeth W. Brooklyn, N. Y. Education A.B., Wellesley, 1916 Kesler, Mary Grace Isles, Lyla Lyons, Ind. Valley Center, Kan. A.B., Indiana, 1915. Institutional Adminis-A.B., Baker, 1910. Religious Education tration King, Leo Hamilton New York City New York City Irvine, Elizabeth S. A.M., Wisconsin, 1906; A.M., Holy Cross, B.S., 1917; A.B., Hunter, 1904. Elementary 1903; A.B., Holy Cross, 1901. Secondary Education Education Isaacs, Walter F. Gillespie, Ill. Kling, Delia Christine Brooklyn, N. Y. B.S., James Millikin, 1909 B.S., 1917. Elementary Supervision New York City Jackson, Catharine Ethel Knapp, Elsie Laura Ida. Mich. Ph.B., De Pauw, 1901. Religious Education A.M., Michigan, 1912; A.B., Michigan, 1906 Knight, Emma Evelyn Jacoby, Ethel Boileau Riegelsville, N. J. Solomon, Kan. B.S., 1918. Institutional Administration A.B., Mt. Holyoke, 1905 Knight, Frederic Butterfield Brookline, Mass. Jameson, Emma Los Angeles, Cal. B.S., California, 1902. French A.M., Harvard, 1915; A.B., Boston, 1913 Eldorado, Ia. Jensen, Valborg Laurine Knight, Martha G. Deer Isle. Me. A.B., Cornell, 1918. Religious Education A.M., 1918; B.S., Maine, 1909 Jeschke, Harry New York City Koch, Dorothy Aspen, Col. A.M., 1899. Educational Psychology A.B., Colorado, 1918. Household Arts Edu-Jessup, Ruth Minneapolis, Minn. cation

Kong, Rhoda Eleanor

A.B., Wheaton, 1918.

Canton, China

Education

A.B., Minneapolis, 1912. Elementary Super-

vision

Education
Linke, Edith Adelaide

A B., Smith, 1908. Education

Krevkenbohm, Caroline New York City Livingstone, Helen Glenham, N. Y. A.M., 1916; B.S., 1914. Education B.S., Pittsburg, 1916. Household Arts Kummerle, Harrison M. Mt. Vernon, N. Y. Loeb, Josephine New York City B.S., C. C. N. Y., 1914 B.S., 1918. Education South Milwaukee, Wis. Logan, Conrad T. Lacy, John Veere Harrisonburg, Va. B.D., Garret Bib., 1917; A.B., Ohio Wes-A.M., 1915; A.B., Randolph Macon, 1910 leyan, 1915. Religious Education Long, Kathryn Marie Mound City, Kan. B.S., 1906; A. B., Coll. of Emporia, 1901. Land, George Albright Manchester, Md. Ph.D., Cornell, 1913; A.B., Franklin and Elementary Supervision Marshall, 1905. Secondary Education Long, Lillian Elizabeth New York City Landerholm, Axel Emanuel New York City A.M., Wisconsin, 1912; B.S., Chicago, 1909 Longman, Marion Walter A.B., Harvard, 1913 Kalamazoo, Mich. Langley, Elizabeth Euphrosyne Chicago, Ill. A.M., Michigan, 1911; A.B., Albion, 1910. Langner, Henrietta M. Buffalo, N. Y. Administration B.S., 1918. Fine Arts Lott, Marietta Creed Jamaica, N. Y. A.B., 1917. Physical Education Lawyer, Florence Shipman (Mrs.) Yonkers, N. Y. Lotz, Elsa Brooklyn, N. Y. A.B., George Washington, 1892. Latin A.M., 1916; B.S., 1912. Religious Education New York City Leary, Daniel Bell Love, Esther Josephine Fremont, Ohio A.M., 1915; A.B., 1909. History of Educa-A.B., Michigan, 1915. Nursing and Health Lovely, Thomas J. Brooklyn, N. Y. Lehman, Eugene Heitler New York City A.B., C. C. N. Y., 1918. History A.M., Yale, 1910; A.B., Yale, 1902 Luft, Harry Leopold Brooklyn, N. Y. Leigh, Florence Boscom Little Rock, Ark. B.S., 1915. Physical Training A.B., Kentucky, 1908 Lustig, Emilie New York City Leiva, Luis A. Tirapegui Santiago, Chile A.B., Hunter, 1918. Mathematics Lyon, Lois Deborah B.S., 1918 Ovid, N. Y. Lepperd, Julius Wayne A.B., Wooster, 1901. Religious Education Atlantic Highland, N. J. Lyon, Marjory Franklin, Pa. A.B., Dickinson, 1916. Administration of A.B., Toronto, 1918. English Education McClelland, Clarence Paul Carmel, N. Y. Lerner, Hannah New York City B.D., Drew Theological, 1910; A.B., Wes-. A.B., Hunter, 1918 leyan, 1907. Religious Education Stelton, N. J. McClure, Helen New York City Letson, Evelyn Roberta A.B., Randolph-Macon, 1918. Physical Edu-B.S., 1913. Education cation McDaniel, Leon Sayre Brooklyn, N. Y. Levinson, William New York City A.M., 1918; A.B., Bethany, 1914 A.B., C. C. N. Y., 1918. History McDonald, John Arthur Warren, Ohio A.B., Pennsylvania, 1915. Elementary Edu-Levy, Clara Newark, N. J. Pd.M., N. Y. U., 1916; B.S., N. Y. U., 1916 Levy, Elsa Helene Kisch (Mrs.) Palisade, N. J. McDowell, Edith Baltimore, Md. B.S., 1916. Physical Education A.B., Goucher, 1914 Lew, Timothy Tingfang Whitewater, Wis. Nanking, China McFarlane, Dorothy May B.S., 1915. Household Administration B.D., Yale, 1918; A.M., 1915; A.B., 1914 Lewis, John William Edinboro, Pa. MacGregor, Kate Miller Hillburn, N. Y. A.B., Colgate, 1917. Religious Education B.S., 1912. Elementary Supervision Chihli Province, China McKechnie, Mary Waters New York City Li, Chien Hsiin B.S., 1918. Nursing and Health B.S., 1918. Administration Lieberman, Jacob New York City McKee, William John Aspinwall, Pa. B.S., C. C. N. Y., 1915. Physical Science C.E., Cornell, 1909. Administration MacKinnon, Marion Grace Lim, Katharine Ong-Neo Seattle, Wash. A.B., McGill, 1910. Household Arts Education Singapore, Straits Settlements MacKnight, Lydia Edwardina (Mrs.) A.M., 1918; A.B., Franklin, 1915. Kinder-New York City garten Foochow, China B.S., 1917. Elementary Education Ling, Chen Ping A.B., Rochester, 1918. Administration of New York City McLane, Fannie Moulton

Yonkers, N. Y.

A.M., 1908; A.B., 1907. Scouting

New York City

McLean, Lester (Mrs).

A.B., Colorado, 1900

McMinn, Vaun Davis Jefferson, Pa. Miller, Clara Josephine Geneva, Ill. A.B., West Virginia, 1913. Education B.S., Wisconsin, 1917. Institutional Admin-McMillan, William Buchanan Chatham, N. J. istration A.B., Southwestern, 1916 Miller, Gertrude Anna Beatrice, Neb. McMullen, Lynn Banks Valley City, N. D. A.B., Stanford, 1912. House Design B.S., De Pauw, 1897. Administration Miller, Luther Paul Harrisburg, Pa. A.B., Pennsylvania Coll., 1917. Adminis-McNeal, Wylle B. Wheatland, Kv. B.S., Chicago, 1915. Education tration McNeill, George Albert Loveland, Ohio Milne, Cyrus G. Brooklyn, N. Y. A.B., Miami, 1914. Secondary Education A.B., C. C. N. Y., 1918. History Maclay, Lillian Plainfield, N. J. Mills, Marian Emily Port Byron, N. Y. A.B., Mt. Holyoke, 1906. Household Arts B.S., 1917 Maddi, Pattronella Marie New York City Mohain, Joseph Patrick Newton, N. J. A.B., Union, 1913 B.S., 1918. Fine Arts Education Madison, Arthur Alexander New York City Mohan, Lucy Florence Brooklyn, N. Y. A.B., Radcliffe, 1903. A.M., 1918; A.B., Bowdoin, 1910 Mathematics Manson, Grace Evelyn Baltimore, Md. Montgomery, Urdell Lincoln, Neb. A.B., Goucher, 1915. Psychology A.B., Hastings, 1899. Sociology Manzer, Charles West Windsor, Vt. More, Mary Baldwin Chatham, N. J. A.M., 1917; A.B., Dartmouth, 1916 A.B., 1897 Tacoma, Wash. Morrison, John Cayce Leonia, N. J. Marsh, Arthur Lyman A.M., Chicago, 1911; A.B., Univ. of Puget A.M., 1916; B.S., 1915; A.B., Valparaiso, Sound, 1908 1912. Administration Marshall, Fay Bloomfield, Ind. Morrow, Paul Reed Huntington, W. Va. B.S., Franklin, 1906. Elementary Education A.B., West Virginia, 1909. Secondary Edu-Marshall, Lucile Rogers (Mrs.) cation Moskowitz, David H. Brooklyn, N. Y. Brooklyn, N. Y. A.B., Utah, 1912 A.M., 1914; A.B., 1913. Mathematics Martin, George Ellsworth Kearney, Neb. Munro, Paul Merritt Buena Vista, Ga. A.B., Nebraska, 1914. Administration A.B., Emory, 1910. Secondary Education Martyn, Burr Hasbrouck Heights, N. J. Munsell, Hazel Edith Monson, Mass. A.B., 1918. Administration A.B., Mt. Holyoke, 1914 Mason, Frances V. East Bloomfield, N. Y. Murphy, Marie Virginia Covington, Ky. B.S., 1916. Rural Education B.S., 1915. Fine Arts Maxwell, Mirdy Aleen St. Paul, Minn. Murray, Effingham C. New York City B.S., Minnesota, 1914. Institutional Admin-A.B., Haverford, 1905 istration Murtland, Cleo New York City Mead, Anna Rachel B.S., 1918. Vocational Education Greenwich, Conn. A.B., Smith, 1918. English Myers, Charles Everett Summersville, W. Va. Mead, Douglass S. Greenwich, Conn. B.S., West Virginia, 1914; A.B., Illinois, 1913. Rural Education A.B., Dickinson, 1917 Medders, Caroline MacKay Needham, Mary Leetha Modesto, Cal. Still Pond, Md. Ph.B., Chicago, 1918 A.B., California, 1915. Religious Educa-Medlar, Reba Neitz Reading, Pa. tion A.B., Wellesley, 1907 Nesmith, Mary Ethel Lake City, S. C. Megahan, Anna Margaret Brooklyn, N. Y. B.S., 1912 B.S., 1917. Household Arts Education Nichols, Marjorie Orange, N. J. Merritt, Elizabeth Rider Danbury, Conn. A.B., 1918. English B.S., 1918. Fine Arts Nickel, Gilbert Glen Cove, N. Y. Merritt, Laura Belle Geneva, N. Y. A.M., Lafayette, 1915; A.B., Lafayette, Ph.B., Syracuse, 1909 1913. Administration Meyer, Eleanor Ann Anthony, Kan. Noffsinger, John S. Brooklyn, N. Y. Ph.B., Chicago, 1913. History A.M., Chicago, 1915; A.B., Mt. Morris, Meyer, Helen Yonkers, N. Y. 1910 B.S., 1913. Psychology Norman, James William Hartwell, Ga. Miles, Irene Lenore A.M., Harvard, 1912; A.B., Mercer, 1906. Brooklyn, N. Y.

Secondary Education

A.B., Dakota Wesleyan, 1911

Mitchell, S. D.

Notson, Louise

Liberty, Pa.

A.B., Vassar, 1910. English

A.B., State Coll. (Pa.), 1918. Psychology

Miller, Clara J.

Oak, Dorothy New York City Poor, Martha Viola Hillside, Me A.B., 1918. Biology A.B., Wellesley, 1903 Poull, Louise Elizabeth Oller, Marie New York City Ellensburg, Wash. B.S., 1917. Psychology A.M., 1913; B.L., Smith, 1903. O'Neill, Alexander Joseph New York City Prichard, Mahala Dorcus Fairmont, W. Va. A.B., C. C. N. Y., 1916. English A.B., West Virginia, 1010. Education Orr, Adelaide Cincinnati, Ohio Prichard, Nell Fairmont, W. Va. A.B., Wellesley, 1912. Nutrition A.B., West Virginia, 1917. Institutional Administration Orr, Ethel M. Pittsburgh, Pa. B.S., 1916 Pryor, Elizabeth Durrin New York City Ortman, Elmer John Newport, Ore. A.B., Vassar, 1906 A.B., Oregon, 1917 Pryor, Hugh Clark New York City O'Shea, Harriet E. A.M., 1917; A.M., Colorado, 1912; A.B., Madison, Wis. A.M., 1917; B.S., Wisconsin, 1916 Colorado, 1911 Osler, Florence Christine Pyle, Edna E. Los Angeles, Cal. Tulsa, Okla. B.S., Mills, 1916. Institutional Administra-A.B., Emporia, 1910. Sociology Rabus, Maximilian Moosburg, Bavaria Ostrander, Gretchen Pond Schuylerville, N. Y. Radcliff, Clara Adrianna Yonkers, N. Y. B.S., 1918. Kindergarten Education A.B., 1918. History Osuna, John Joseph Hamilton, Ohio Rade, Marie Sophia New York City A.B., State College, 1912. Administration A.B., Adelphi, 1917 Hinghwa, Fukien, China Rae, Anne Mutch Brooklyn, N. Y. Ou, Yuan Hwai A.B., Southwestern, 1918. Administration A.B., 1906; A.B., Hunter, 1903. Secondary Page, Frank Russell Staten Island, N. Y. Education Randall, Laura A.B., Harvard, 1896 Boston, Mass. Panlasigui, Isidore Vigan, P. I. B.S., Minnesota, 1917 A.B., Cornell, 1918. Religious Education Rauscher, Anna Marion Grantwood, N. J. B.S., 1913. Mathematics Parker, Charles L. (Mrs.) Odessa, Tex. Raynor, Anne Washington A.B., Texas, 1917. Mathematics Leonia, N. J. Parson, Martha Cornelia Ridgewood, N. J. Ph.B., Chicago, 1917. A.B., Wellesley, 1917. Religious Education Reavis, George Howe Baltimore, Md. Patton, Martha Huntingdon New York City A.M., 1916; B.S., Missouri, 1911. Admin-B.S., 1918 istration Paul, Gladys Eliot, Me. Redman, Laura Packard (Mrs.), New York City A.B., Colby, 1914 A.B., Vassar, 1906 Reed, Ruth Esther Paxton, Gertrude Curtiss Nevada, Ia. Algona, Iowa B.S., Iowa State, 1904. Household Arts A.B., Grinnell, 1907 Pearce, Helen Eliza Plainfield, N. J. Reidy, Katharine Louise New York City A.B., Smith, 1915. Biology B.S., 1918. Peebles, Waldo Cutler Yonkers, N. Y. Reilly, Leola Thrasilla Elizabeth, N. J. A.B., Harvard, 1917. Education B.S., St. Elizabeth Coll., 1917. Institutional Pendleton, Constance Bryn Athyn, Pa. Administration B.S., 1999. Household Arts Education Reimherr, Frederick William Orange, N. J. Phillips, Edna K. New York City A.B., Colgate, 1907 Westfield, N. J. Ph.B., Hunter, 1895 Reuther, Edward Arthur Pider, Myrtle Zoa Mankato, Kan. B.S., 1911. Vocational Education A.M., Northwestern, 1911; A.B., North-Rexroth, Elizabeth Marion, Ohio western, 1910. Religious Education A.B., Ohio Wesleyan, 1907. Religious Edu-New York City cation Pierce, Evelina Madison, Wis. A.B., Vassar, 1902 Reynolds, Annie Pilling, Elizabeth New York City Ph.B., Chicago, 1903. Elementary Supervision Rheinhold, Robert Max New York City A.B., Wellesley, 1915. Nursing Education Pinger, Lulu M. Leadville, Col. A.B., Michigan State Normal, 1918 Winnetka, Ill. Ph.B., Colorado, 1902. Mathematics Rhodes, Earl N. Ph.B., Chicago, 1912 Pittman, Marvin Summers Monmouth, Ore. New York City A.M., Oregon, 1918; A.B., Millsops, 1905. Riblet, Mary Varian Rural Education A.M., 1905; B.S., 1903 Riggs, Lucy Young Lawrence, Kan. Polk, Samuel Joseph New York City

A.B., Kansas, 1899

B.S., C. C. N. Y., 1918. History

Ritchie, Margaret Bay City, Mich. Sharot, Mary Elizabeth Brooklyn, N. Y B.S., 1918 A.B., Adelphi, 1914 Robinson, Anna E. New York City Shaver, Edwin L. Eau Claire, Wis. A.M., N. Y. U., 1911; A.B., Hunter, 1900 A.M., Wisconsin, 1918; A.B., Lawrence Coll., Robinson, Ethel Maria East Orange, N. J. IQI3 Shaw, Frank Leslie B.S., 1917 New York City Robinson, Mary Elizabeth A.M., 1918; LL.B., Georgetown, 1911; A.B., Tufts, 1904. Administration B.S., 1915 St. Johns, N. B., Canada Robinson, William McKinley Wauseon, Ohio Sherer, Gertrude Roberts Worcester, Mass. A.M., Leland Stanford, 1917; B.L., Smith, B.S., Hiram, 1916 Rockwell, Lillie May, Berkeley Springs, W. Va. A.B., Goucher, 1912 Shilling, Robert Edward Dover, Del. Roe, Chungil Yhan Ph.B., Dickinson, 1912 Chinnampo, Pyung Yaung, Korea Shor, Gustave New York City A.B., C. C. N. Y., 1917. English A.B., Ohio Wesleyan, 1918. Religious Education Short, Jenoise Brown (Mrs.) Brooklyn, N. Y. Rosenthal, Abraham New York City B.S., Wisconsin, 1914 B.S., 1918. Physical Education Shupp, Dorothea Louise W. Philadelphia, Pa. Rosenberry, John R. Edgewater, N. J. B.S., 1916 E.E., Lafayette, 1911. Industrial Arts Sinclair, J. Edwin Newark, N. J. Ross, Mary Howell A.M., 1907; B.S., 1906. Baldwin, Kan. Skinner, Gertrude Eliza A.B., Baker, 1912 Brooklyn, N. Y. Rust, Elsa G. Hackensack, N. J. B.S., 1912. Education B.S., 1916. Smalling, Drue Clinton Bell Buckle, Tenn. Sabine, Harold Francis Mt. Vernon, N. Y. A.B., Washington, 1915. English Smith, Agnes Blanche Round Mountain, Tex. Ph.B., Hamilton, 1909 A.B., Southwestern, 1918 Sailer, Josephine Englewood, N. J. A.B., 1918. English Smith, Blanche A. Elba, Mich. B.S., Michigan Agricultural Coll., 1918. Sanford, Robert George Leonardo, N. J. Foods, Nutrition, and Sanitation A.B., Yale, 1905. Smith, Frederick Newton, East Worcester, N. Y. Sangster, Frank Ossining, N. Y. A.B., Iowa, 1915. Industrial Arts A.B., Princeton, 1907. Administration New Haven, Conn. Saxman, Ethel Julia La Trobe, Pa. Smith, Milton Myers B.S., 1918. Physical Education A.B., Clark, 1912 Sayles, Marie Smith, Switzer Warren New York City Flint, Mich. B.S., 1914. Rural Education B.S., N. Y. U., 1918 Schoening, Frederick Conrad New York City Snider, Adda Latta Hastings, Neb. A.B., Nebraska Wesleyan, 1911. English B.S., 1918 Scholes, Bonnie Elizabeth Santa Barbara, Cal. Snow, Minnie Rose East Hampton, Conn. B.S., Wisconsin, 1912. Nutrition Ph.B., Wesleyan, 1897. Mathematics Schroyer, Chester Franklin Snyder, Arrietta New York City Loganton, Pa. A.B., Bucknell, 1918 A.B., 1905 Snyder, Christine Effie (Mrs.) Rahway, N. J. Schupper, Charles Brooklyn, N. Y. A.B., N. Y. U., 1917. History of Education B.S., State College, 1908. Schwarz, Mae Louise Paterson, N. J. Soltes, Mordecai Brooklyn, N. Y. A.M., 1918; B.S., N.Y. U., 1915. Educa-B.S., 1918. Physical Science Sears, Jesse Brundage Palo Alto, Cal. tional Administration A.B., Leland Stanford, 1909. History of Ed-Sommerman, Susan L. Southville, Mass. A.B., Wellesley, 1917. Educational Psychology ucation Selby, Forest Tobias Oxford, Ohio Sones, Mabel Vera Anamosa, Iowa B.S., Miami, 1915. Industrial Education A.B., Coe, 1915 Seneker, James Seehorn Sparrow, Caroline Elizabeth New York City Menden, Mo. B.D., Vanderbilt, 1912; A.B., Missouri, 1910. B.S., 1919. Nursing Religious Education Spicer, Edith May Cincinnati, Ohio Shachtman, Joseph Brooklyn, N. Y. Education A.B., De Pauw, 1914. A.B., C. C. N. Y., 1918. English Spicer, Lucy Elizabeth Gunnison, Colo. Shaffer, Thomas Carlyle A.B., Chicago, 1905 Narberth, Pa.

Stern, David Sussman

A.M., 1916; B.S., 1915

New York City

A.M., Pennsylvania, 1911; A.B., Pennsyl-

vania, 1910. History

Terry, Eva

A.B., Wellesely, 1901

Thibaudeau, Marie

Stewart, Harold Dean Newark, N. J. Thomas, Guy Revere Brooklyn, N. Y. A.B., Ursinus, 1907 B.S., Pennsylvania (Gettysburg, Pa.), 1905. Stocker, Stella Prince New York City Physical Science Thomas, Tilla Pearl A.B., Michigan, 1880 Youngstown, Ohio Storms, Lillian Boynton Berea, Ohio A.B., Western Reserve, 1914. French B.S., Iowa, 1908. Nutrition Thompson, Margaret Logan Tarkio, Mo. Stinson, Harriet Cunningham A.B., Tarkio, 1916. Kindergarten Education Lunenburg, Mass. Thornhill, Gertrude Permelia Wellston, Ohio A.B., Radcliffe, 1905 A.B., Ohio, 1918. English Strong, Margaret Hart New York City Thrall, Elsie Hunting Angelica, N. Y. A.B., 1911. Psychology B.S., 1917, French Streid, Freda Irene Washington, Ill. Tierney, Evelyn Bertha Elma, Iowa Ph.B., Chicago, 1917; A.B., Bluffton, 1916. A.B., Iowa State Teachers Coll., 1918. Psy-Household Arts chology Shelbyville, Ind. Stukey, Arthur E. New York City Tindall, Glenn Means B.S., Alfred, 1910 A.B., Northwestern, 1916 Penn Yan, N. Y. Tinsley, John Alexander Sturdevant, Alice Barbourville, Ky. B.S., Elmira, 1916 A.B., Michigan, 1916 Administration Sturtevant, Sarah Martha Hollister, Cal. Townsend, Cora H. Whitaker (Mrs.) Mt. Vernon, N. Y. A.B., California, 1904. Adviser of Women New York City Suchoff, Libbie A.M., Brown, 1906; A.B., Brown, 1905 A.M., 1915; A.B., Hunter, 1911 Touton, Frank Charles Edgerton, Wis. Summy, Ethel Isabelle Washington, D. C. A.M., 1917; Ph.B., Lawrence, 1901. Secon-A.B., George Washington, 1918 condary Education Super, Edith Murray Lansdowne, Pa. Tremper, Clara Louise Rhinebeck, N. Y. A.B., Dickinson, 1902. Nursing B.S., 1913 Swann, Ann Perkins Plainfield, N. J. Trube, Jessie Maud Yonkers, N. Y. A.B., Vassar, 1917. Religious Education B.S., 1904. Kindergarten Supervision Sweet, Mary Bailey Topeka, Kan. Tsai, Choming Peking, China A.M., Ohio, 1918; A.B., Miami, 1917 A.B., Kansas, 1903 Swett, Carolyn Patte New York City Tucker, Halcyon Louise South Orange, N. J. A.B., Vassar, 1918. Mathematics B.L., Smith, 1895 Swift, Elizabeth Andrews New York City Tupper, Sarah Spalding New York City A.B., Illinois, 1909 B.S., 1917. Household Arts Sylvan, Frances Elizabeth Columbia, S. C. Turley, Anna May Orleans, Ind. A.M., South Carolina, 1916; A.D., College B.S., Purdue, 1910 for Women, Columbia, S. C., 1915. English Turnbull, Annie Grace Orange, N. J. Sylvester, Grace Evelyn West Acton, Mass. A.B., 1908 Ph.B., Vermont, 1910 Tyndale, Elsie Honn (Mrs.) Takayama, William Kiyashi Minneapolis, Minn. Meguro, Tokyo, Japan A.M., Utah, 1911; Ph.B., Chicago, 1901. A.M., 1918; A.B., Higher Normal School, Psychology Tokyo, Japan, 1912. Sociology Tyson, Edna Anna West Reading, Pa. Bowling Green, Ohio Talbot, John Edgar A.B., Swarthmore, 1909. English A.B., Nebraska Wesleyan, 1910 New York City Urban, Ladislav Ridgefield, N. J. Talbot, LaFayette A.M., 1917 A.M., N. Y. U., 1907; B.S., N. Y. U., 1905; Van Schaick, Lemuel W. Scarsdale, N. Y. Pd.D., N. Y. U., 1898; Pd.M., N. Y. U., A.M., 1915; A.B., Colgate, 1904. Adminis-1895. Administration tration Brooklyn, N. Y. Taylor, Jeannette Stuart Newark, N. J. Vanuxem, Louisa A.M., 1908; A.B., Vassar, 1904 B.S., 1916. Household Arts Taylor, Howard Frank New York City Van Wagemen, Mary Lacy Orange, N. J. A.M., Chicago, 1906; A.B., Yale, 1902 A.B., Bryn Mawr, 1909 New York City Tenrosen, Daniel Secor, Ill. Vautrin, Minnie A.B., C. C. N. Y., 1914

Summit, N. J.

Niagara Falls, N. Y.

A.B., Wellesley, 1918. Fine Arts Education

Schools

Voelker, Paul Frederick

A.B., Illinois, 1912. Supervision of Foreign

A.M., Drake, 1907; B.Ph., Drake, 1906;

New York City

Vollintine, Grace Lincoln, Neb. Wilkinson, James G. Ph.B., Chicago, 1917. Elementary Supervision Scarborough-on-Hudson, N. Y. Wallace, C. Earl New York City B.S., Northwestern, 1906 A.B., Northwestern, 1912. Industrial Arts Williams, Ben McGee Statesboro, Ga. Walsh, John Vincent New York City A.B., Mercer, 1915 A.B., C. C. N. Y., 1904 Williams, Ethel Joy Ottawa, Kan. Wang, Wen-Pei Peking, China A.B., Ottawa, 1916 A.M., 1918; B.S., Pennsylvania, 1917. Williams, Jennie Emporia, Kan. Sociology A.B., Kansas State Normal, 1910. Elemen-Wanner, Dora Elizabeth Shillington, Pa. tary Supervision B.S., 1916. Elementary Education Williams, Milton Maurice Fredericktown, Ohio Ward, Elizabeth Harrison A.B., Ohio Wesleyan, 1914 Oneonta, N. Y. B.S., 1910. Fine Arts Williamson, Effie May New York City Long Branch, N. J. Ward, William Anthony B.S., 1917 A.B., University of America, 1914 Wilson, Christine Towne East Orange, N. J. Warner, Katherine Gale Wooster, Ohio A.B., Mt. Holyoke, 1917 A.B., Baldwin-Wallace, 1915. Social-Reli-Wilson, Jacob Brooklyn, N. Y. gious Work A.B., Cornell, 1919. Spanish Watkins, Clyde Howard Nevada, Tex. Wilson, Lester MacLean Charleston, Ill. A.B., Yale, 1915; A.B., Baylor, 1912 A.M., Chicago, 1909; A.B., Park, 1906 Watts, Marie Loretta Piermont, N. Y. Wilson, Sarah Moore Philadelphia, Pa. B.S., 1909. Household Arts A.B., St. Elizabeth, 1917 Webb, Ethel Willard Mt. Vernon, N. Y. Winans, Edward Jones Peking, China A.M., 1916; A.B., 1913. History A.M., Oxford, 1913; A.B., Oxford, 1910; Wedin, Jessie Isabelle Grantsburg, Wis. A.B., Williamette, 1907 B.S., 1917 Winans, Josephine Fearon Ironton, Ohio B.S., Michigan, 1908. Household Arts Welch, Alberta M. New York City A.M., 1908; A.B., Wellesley, 1895. Mathe-Wolchuck, Harry Jacob New York City matics B.S., Chicago, 1918 Wells, Edna Marie New York City Wolo, Plenyono Gbe Grand Ceos, Liberia, West Africa A.B., Hunter, 1916. Fine Arts Welton, William DeForest, New Rochelle, N. Y. A.B., Harvard, 1017 B.S., Alfred, 1913. Physical Science Wong, Mao Tao Soochow, Kiangsu, China B.S., 1918. Philosophy of Education Wessner, Anna Essie Allentown, Pa. B.S., 1915. Household Arts Wood, LaVergne Racine, Wis. Westfall, Martha A.M., 1918; A.B., Wisconsin, 1910. Mathe-New York City B.S., 1915 matics Wheat, Frank Merrill New York City Woodin, Hilda Bernicia New York City A.M., 1910; D.Sc., Kentucky, 1907; B.L., A.B., California, 1917. English and History Kentucky, 1906; B.S., Kentucky, 1905 Woodsworth, Harold F. Whinery, Smiley M. Kingston, Ont., Canada Warren, Ind. A.M., Indiana, 1917; B.S., Indiana, 1916. A.B., Toronto, 1907 Administration Yanowski, Felix Athens, W. Va. Whitaker, Ruth Lincoln B.S., West Virginia, 1908. Administration Chicago, Ill. A.B., Illinois, 1912. History Zehmer, George Barkerville McKenney, Va. Chester, S. C. White, Margaret B.S., William and Mary, 1916. Administra-A.B., Hollins, 1917. Household Arts Education tion Zienfeld, Minnie New York City White, Mary Louisa Norfolk, Va. A.B., Hunter, 1918. History A.B., Randolph-Macon, 1903 Ziegler, Olive Irene Toronto, Canada Whitney, Henry James Ellensburg, Wash. A.B., Toronto, 1914 B.S., Northwestern, 1905. Vocational Edu-Zouck, Ada Elizabeth Reisterstown, Md. cation A.B., Goucher, 1916. English Wiener, Anna Marie New York City

A.B., Hunter, 1918. Science

B.S., Harvard, 1914. Administration

New York City

Fall River, Mass.

Wiggins, Theodore DuBois

A.M., 1918; B.S., 1917

Wilbur, Howard

UNCLASSIFIED STUDENTS IN EDUCATION

Abramson, Blanche B.
Adams, Mary Rebecca
Akers, Matilde H.

New York City
Sterling, Kan.
Lambertville, N. J.

Allard, Lucile Edna Pueblo, Col. Oswego, N. Y. Allen, Grace Amelia Allen, Harold B. Leonardo, N. J. Allen, Irene Verita Newburgh, N. Y. Allen, Mary Scott New York City Allen, Virginia Cullom New York City Amadeo, Teresa Guaynabo, P. R. Amerman, Ada M. W. (Mrs.) Scranton, Pa. Amundsen, Martha Jonine Bemidji, Minn. Anderson, Sarah Davis Bayonne, N. J. Andrews, Mary Todd Harlock, Md. Andrews, Susan May Bridgeport, Conn. Ansanelli, Vandalia Madeleine, New York City Ansley, Margaret L. Birmingham, Ala. Arason, Steingrimur

Reykjavik, Grundorstig 3, Iceland Arlinghaus, Elizabeth Mary

Weehawken Heights, N. J. Arnold, Charlotte New York City Austin, Margaret Hyde Fitchburg, Mass. Auston, Ethel Lillian Brookings, S. D. Azadian, Arous Hovanes Smyrna, Asia Babb, Helen Hannah West Philadelphia, Pa. Babcock, Harriet H. (Mrs.) Westerly, R. I. Bagley, Helen Goltra (Mrs.) New York City Baker, Mary Louise Lockport, N. Y. Baldwin, Elizabeth Marcia Newark, N. J. Baldwin, Helen L. Elmhurst, N. Y. Ball, I. Grace New York City Ballew, Zula Zong Emory, Tex. Ballou, Ethel LaVerne Superior, Wis. Balmaseda, Esperanza Mexico City, Mex. Banker, Carolyn Elizabeth New York City Barnes, Arthur E. Clyde, N. Y. Barnes, Ethel Dalrymple Fort Worth, Tex. Barrows, Bernice Esther Carver, Mass. Bartlett, Clare Great Notch, N. J. Bartlett, Lucy Vaupel New York City Basmadjian Khoren Arttale Asia Minor Bassett, Katherine Elizabeth Oswego, N. Y. Baum, Horatio Peter Briarcliff Manor, N. Y. Beddall, Lois Mary Ellsworth, Wis. New Haven, Conn. Beecher, Emily New York City Beers, Carrie Evelyn Beisel, Anne Louise La Crosse, Wis. Belden, Ethel A. Springfield, Mass. Belmont, Harriet A. New York City Hackensack, N. J. Bennett, Agnes L. Bensinger, Margaret Frances Summit, N. J. Benson, Helen Moore Roselle, N. J. Bent, Julia Etta Glens Falls, N. Y. Berkley, Nina Frederica Mission Hill, S. D. Cincinnati, Ohio Bernheim, Lea Iplugine Keyport, N. J. Bilderback, Willis Edward Bigelow, Gertrude Isabel Norund, Mass. Bingham, Marie Cogswell (Mrs.)

Madison, N. J.
Bird, Susie Bellefourchi, S. D.
Birmingham, Agnes Veronica New York City

Black, Ethel Isabel Worthington, Minn. Blackwell, Anna King Washington, D. C. Blumborg, Hilda New York City Boddy, Grace Denver, Colo. Boezinger, Lydia Marie Palo Alto, Cal. Bornstein, Helen New York City Boryer, Mary Grace Hagerstown, Md. Boyle, Isabel Brooklyn, N. Y. Bradt, Gertrude Elizabeth Castile, N. Y. Brett, Edith Marilla Flushing, N. Y. Briggs, Annie Bennett New York City Briggs, Grace Warren Englewood, N. J. New York City Brill, Eleanor Leola Bristow, Alice Andrews New York City Brogdon, Harriette Britton Richmond, Va. Brooks, Leta Waco, Tex. Brown, Cecile New York City Browne, Caroline Ella West Bloomfield, N. Y. Browne, Hetty Sibyl (Mrs.) Rock Hill, S. C. Buchanan, Jamesena Yonkers, N. Y. Buckpitt, May Argul Independence, Kan. Bull, Marion Loder Cortland, N. Y. Bullis, Jeanette New York City Burke, Vincent Patrick St. John's, N. F. Burke, Viola Grace Kearney, Neb. Butterfield, Eugenie Mae (Mrs.), Newark, N.Y. Byerly, Anne Elizabeth Wuchang, China Cadoo, Sarah Summit, N. J. Carr, Cornelia Archbold Bristol, Pa. Carroll, Mary Evelyn Oswego, N. Y. Center, Augusta Blanchard Forsyth, Ga. Chang, Ching Yu Pootlingfu, Chihli, China Chang, Sophia M. K. Shanghai, China Chappell, Cleo R. Kearney, Neb. Chase, Sara Elizabeth Keene, N. H. Chuang, Chai Hsuan Foochow, China Clark, Ruth Jacob (Mrs.) New York City Cochran, Mary F. Greeley, Colo. Cole, Carabel Westfield, N. J. Coleman, Constance Lamb New York City Collins, Barbara Engel (Mrs.), New York City Condit. Elizabeth Carv New York City Connell, Claire Eileen Parsons, Pa. Conover, Beulah Rachel N. Plainfield, N. J. Cook, Zeina Eulou Edmonds, Wash. Cooke, Blanche Ellen Dobbs Ferry, N. Y. Cooke, Viola Louisa Rahway, N. J. Cookingham, Bertha Adelia Red Hook, N. Y. Cooley, Adelaide Johnson Newagen, Me. Cooley, Marion M. Waterloo, Iowa Cormier, Edith M. Breaux Bridge, La. Couglin, John New York City Coutler, Jane E. (Mrs.) Vernonville, Ontario, Canada

Vernonville, Ontario, Canada Courtis, Stuart Appelton Detroit, Micho Coykendall, Mary Helen Philadelphia, Pa. Craig, Mary Anderson Rock Hill, S. C. Cross, Nellie Billington (Mrs.)

Fultonville, N. Y.

Crowley, Etta C.	New York City
Culver, Helen Balch (Mrs.	.) Seattle, Wash.
Cunningham, Lilla	Norristown, Pa.
Cunningham, Mabelle Lou	ise Cleveland, Ohio
Daniels, Ethel	Sag Harbor, N. Y.
Darcy, Margaret C.	Elmhurst, L. I.
Davidson, Isobel	LaPorte, Ind.
Davis, Magdalene	' Ebensburg, Pa.
Davis, Mary B.	Greenville, S. C.
Davis, Mary Dabney	New York City
Dawson, Marjorie Eccles	Jersey City, N. J.
Day, Ellen	Cedarhurst, L. I.
De Lima, Lucie (Mrs.)	New York City
Deming, Lucile	New York City
den Bleyker, Anne	Kalamazoo, Mich.
Deuscher, Valerie	New York City
Dick, Florence Estelle	Yonkers, N. Y.
Dieffenbacher, Agnes Edna	Yonkers, N. Y.
Dobbin, Benjamin	Port Chester, N. Y.
Dodge, Susan Maretta	Longmeadow, R. I.
Donohugh, Emma Edith	Cynwnd, Pa.
Dowell, Dorothy Antoinet	te
	Northampton Mass

Northampton, Mass Dryden, Grace Hannah Copenhagen, N. Y. Duchesne, Irene Mary Plainfield, N. J. Dudley, Charlotte New York City Duggan, Janie Prichard Clayton, Ga. Durboraw, Augusta S. New York City Durboraw, Ethel Bauta (Mrs.) Lamoni, Iowa Edwards, Grace New York City Eisenhauer, Lulu J. Ridgewood, N. J. Ellison, Grace Flora Superior, Neb. Elmore, Lillian Myrtle Swarthmore, Pa. Emmons, Mary Weehawken, N. J. Ennis, Evelyn New York City Everett, Marcia New York City Fairlamb, Blanche Armstrong Chester, Pa. Fales, Roy George Buffalo, N. Y. Faison, Martha Hicks New York City Ferguson, Ethel Louise Skanateles, N. Y. Ferriggian, Nancy Katherine New York City Ferris, Florence L. New York City Finn, Claire Helen Winsted, Conn. Finney, Ross L. New York City Firor, Mabel C. Baltimore, Md. Fitzpatrick, Corinne M. Greenwich, Conn. Flinn, Emma LaGrange, Ill. Forbes, Arabel Fellows Northampton, Mass. Ford, Ellen P. New York City Fowlkes, John Guy New York City Franke, Wilhelmina Theodosia Anchorage, Ky. Franken, Richard Benjamin New York, N. Y. Frazee, Laura Antoinette Indianapolis, Ind. Freeland, Daisy Taylor Garfield, N. J. Freeland, Grace Alba Summit, N. J. Freeman, Grace Margaret East Orange, N. J. Friedland, Abraham H. New York City Fuentes, Alfonso Alracez Habana, Cuba Fuller, Rachel Anne New Haven, Conn.

Fulton, Jane Mt. Vernon, N. Y. Gabrielson, Mary Hutchinson, Kan. Gale, Ethel Blanche Moberly, Mo. Gardner, Willard Byron Cedarhurst, L. I. Wessington, S. D. Garfield, Elva Ruth Garland, Kate Conover New Brunswick, N. J. Garst, Gretchen New York City Garvin, Alice Esther Middletown, Conn. Gebhardt, Erma Rode Erie, Pa. Geddes, Grace Newton Ill. George, Jennie W. Rochester, N. Y. Getz, Elizabeth Miller New York City Giery, Mary E. Long Island City, L. I. Gifford, Mary Elizabeth Yonkers, N. Y. Brooklyn, N. Y. Gilfov, John Francis Xavier Gill, Elizabeth Ingersoll Hackensack, N. J. Given, Bertha Dumont, N. J. Glasser, Forrest Grover Butler, N. J. Glover, Clara Sangle (Mrs.) Bronxville, N. Y. Gordon, Mary Magdalene New York City Grace, M. Annie Hamilton, Md. Graham, Grace Caroline Yonkers, N. Y. Fort Scott, Ky. Greene, Isa Allene Gross, Sophia Katherine New York City Grzywacz, Leona Augusta Ridgewood, N. J. Guillet, Alma Clark New York City Gunther, Theresa Charlotte Hackensack, N. J. Hahn, Elizabeth Marie

Cornwall-on-Hudson, N. Y. Hall, Jessie Elizabeth (Mrs.) New York City Hall, Maude Manuell Atlanta, Ga. Hamill, Josephine Elizabeth, East Jaffrey, N. H. Hammond, Charles Wesley Edgewood, Iowa Hannon, Bess Adelia Lee, Chautaugua, N. Y. Hanrahan, Loretta Louise Bath, N. Y. Hardie, Orla V. Port Chester, N. Y. Harding, Mary Elizabeth, Grand Rapids, Mich. Harrelson, Helen Belton, Mo. Harrington, Mary K. Woodhaven, L. I. Harrison, Anna Clarissa Chatham, N. J. Hatch, William Drummond (Mrs.)

New York City Hausam, Winnifred May Chicago, Ill. Hayes, Katherine Agatha New York City Hazard, Helen Holiston Rock Island, Ill. Heck, Pauline Paterson, N. J. Hemingway, Grace Oak Park, Ill. Henderson, Josephine Titusville, Pa. Hennessy, Edward Thomas Scarsdale, N. Y. Hermansen, Ruth Amanda New York City Herrig, Anna Bertha Saginaw, Mich. Hersey, Katharine Frances Scarboro, N. Y. Hersom, Hortense Belgrade Lakes, Me. Hicks, Grace DeWitt Scranton, Pa. Hilbert, Marie Louise New York City Hilker, Hedwig W. D. Crestwood, N. Y. Hilton, Elizabeth East Orange, N. J. Hoag, Dorothy Moore Pueblo, Col. Hoagland, Mary C. Elizabeth, N. J.

Levy, Alice Martha

01	
Hodgson, Fred J. Paterson,	N. J. Lewis, Lillian Brooklyn, N. Y.
Holden, Dorothy Berrian Millis, M	
Horrigan, Margaret Cecile New York	
Howe, Althine Springfield, M	
Howes, Vera Blake Hudson, M	
Hoyt, Louise Bridgeport, C	
Hughes, Avah Willyn Cincinnati,	
Hurlbut, Floy Huntley,	Neb. Locke, Gladys New York City
Hurwich, Barnett New York	City Loew, Edith Marguerite Brooklyn, N. Y.
Hutchinson, Julie Neville Oswego, I	N. Y. Lomas, Mildred Leola Newark, N. J.
Hutchinson, Mary Davenport Cleveland,	Ohio Long, Ethel Elizabeth Rochester, N. Y.
Hutton, Jean Gertrude East Orange,	N. J. Lowerre, William Merchant Cortland, N. Y.
Ikuta, Yoshiki New York	City Lynde, Ethel Graham (Mrs.), Los Angeles, Cal.
Imamura, Shoichi Tokyo, J	apan McAlpine, Florine Montclair, N. J.
Ingham, Helen Sarah Hume, I	V. Y. McCaffery, Bibiana Virginia New York City
Ingram, Christine Porter Rochester, N	
Ishihara, Kiku Dorothy Tokyo, J	apan McDermott, Mary Campion Worcester, Mass.
Jeffers, Rosa Elizabeth (Mrs.), New York	City MacDonald, Mary Lafit Wellsville, Ohio
Jenkins, Elizabeth Cincinnati,	
Johnson, Josephine Oxford,	
Johnson, Lenora Ellen Springfield,	
Johnson, Marietta J. F. (Mrs.), Fairhope,	
Johnstone, Esther Grantwood,	
Jones, Lillian Louisa Holley, 1	
Jones, Margaret Young, Briarcliff Manor, I	
Joslin, Jane Elizabeth Camden,	
Kapps, Margaret Stander Oak Park	
Kau, Ernest En Wuchang, C	
Kavanagh, Maude Adella Durand,	
Keeler, Alicia Maryville,	
Kelley, Mabel Aries Kelly, Florence Cecelia Milwaukee,	
Kelly, Lyra Foote Yonkers, I	
Kennedy, Florence Ridgewood,	· · · · · · · · · · · · · · · · · · ·
King, Elizabeth Gertrude Ellwood	Maxwell, Robert New York City
North Westport, I	
Kinsey, Annie Lenore Shelbyville,	
Kirby, Sally Simms Goldsboro, I	
Kirkley, James Allen Reno,	
Kishitaka, Takeo Tokyo, J	
Kittredge, Winifred Boyd New Iberia	
Kline, Sophia A. Cumberland,	
Knight, Kathleen Moore Brockton, I	
Knoll, Frederic Jacob Buffalo, I	
Kohler, Sophie H. New York	City Mihleis, Alice May Perth Amboy, N. J.
Koues, Rose Wilkinson New York	City Miles, Lyra Bell Salem, Ore.
Langvick, Mina M. Richville, I	Minn. Miller, Eula Josephine Fargo, N. D.
Larry, Beatrice Elzetta Hyannis, I	Mass. Milligan, Grace Lillian Burns, Yonkers, N. Y.
Latimer, Lois Erwin Waukesha,	Wis. Moody, Marion White (Mrs.) Bath, Me.
Laufer, Florence Verona Paterson,	
Lavery, Mabel J. New York	
La Voy, De Forest New York	
Lawlor, Caroline Elizabeth New York	
Laws, Marion Burton New York	
Leal, Margaret Plainfield,	
Leigh, Muriel Wilson Spokane, V	
Lee, York Tein New York	
Lesslie, Louie Dell Independence,	

New York City Muchleck, Lucy Elizabeth Weehawken, N. J.

Mulliern, Helen	New York City
Murphy, Mary Ethel	New York City
Myer, Lucie	Baltimore, Md.
Myers, Albert William	Castanea, Pa.
Myers, Minnie T.	Fulton, N. Y.
Myrick, Allie Goodwin	Milledgeville, Ga.
Nash, Rose Mary	Plainfield, N. J.
Naylor, Jane	Maynard, Mass.
Nelson, Florence Abbie	Ridgewood, N. J.
Nelson, Virginia La Fayette	Scottsburg, Va.
Newton, Lucy Josephine	San Antonio, Tex.
Newton, Minnie Esther	Mariller, N. Y.
O'Brien, Helen Marie	New York City
O'Connor, Anne Shane	New York City
O'Donnell, Agnes Marie	New York City
O'Hargan, Ruth	New York City
O'Keeffe, Louise Langley	New York City
O'Leary, Ellen Josephine	Worcester, Mass.
O'Rourke, Mary Eleanor	New York City
Odell, Marietta McKinstry	(Mrs.)
	New York City

Oliver, Eleanor Mathews Elberton, Ga. Oppenheimer, Blanche Maass New York City Oyang, Rosamond Yen Wen Shanghai, China Palmer, Marietta Hackensack, N. J. Parker, Claudia Mary Detroit, Mich. Parker, Grace S. Woodville, N. Y. Parsons, Llewellyn New York City Patrick, Charles David Elizabeth, N. J. Patchin, Nelle E. Wyoncena, Wis. Patton, Rubye Carolyn New York City Paul, Helen Elizabeth New York City Payant, H. Felix Faribault, Minn. Peffer, Ernest M. Paterson, N. J. Pendleton, Dorothy I. Haverhill, Mass. Perry, Grace M. Flushing, L. I. Phelps, Alice Elizabeth

Warehouse Point, Conn. Phelps, Helen Elizabeth Worcester, Mass. Phillips, Bessie Louise Hornell, N. Y. Pierce, Beulah Miriam St. Paul, Minn. Pierce, Esther Mabel St. Paul, Minn. Pierce, Fannie Lucinda Kalamazoo, Mich. Pierce, Mary F. Cleveland, Ohio Potter, Grace New York City Potwine, Marjorie A., Warehouse Point, Conn. Poucher, Jane Oswego, N. Y. Powick, Mary E. Westfield, N. J. Powlas, Annie Pauline Hickory, N. C. Pride, Christine Elizabeth Roslyn, N. Y. Pyle, James T. (Mrs.) New York City Quilliard, Margaret Jacot Duluth, Minn. Quimby, Hortense Hackensack, N. J. Radley, Hermon Clinton, Port Washington, L. I. Ramsay, Mary New York City Randall, Cyril Franklin Ridgefield Park, N. J. Rankin, Ada Haile New York City Rayser, Lillian Zoe New York City Reichenbach, Beatrice H. New York City

Reid, Rebecca	Fountain Inn, S. C.
Reil, Sylvia Mary	New York City
Reynolds, Grace	North Norwich, N. Y.
Reynolds, Mabel Pearl	Arlington, N. J
Rich, Frank M.	Paterson, N. J.
Richardson, Ethel Elizab	eth Hartford, Conn.
Rifkin, Lillian Helen	Wilkes-Barre, Pa.
Robertson, Eveline	New York City
Rockwell, Erma M.	Greenwich, Conn.
Roegge, Amy Blanche	Leonia, N. J.
Roger, Ida Evans	Mt. Vernon, N. Y.
Rose, Mary Ann	Troy, N. Y.
Ross, Sarah Frances	Chicago, Ill.
Rowe, Nellie Farrar	Brookings, S. D.
Rugge, Jessie M.	Ridgewood, N. J.
Ryan, Loretta Cecilia	New York City
Salsbury, Rebecca	New York City
Saunders, Gertrude	New York City
Schneider, Marie	Rahway, N. J.
Schneider, Roy Florense	Ossining, N. Y.
Schwarz, Ethel S.	New York City
Schwarz, Sadie	New York City
Schweppe, Emma	San Antonio, Tex.
Scott, Anna C.	Nova Scotia, Canada
Seabury, Jennie Haff	Hempstead, L. I.
Seamen, Florence Madeli	ne Keansburg, N. J.
Sears, Harriet Reed	Leonia, N. J.
Seeley, Hettie Letetia	Ann Arbor, Mich.
Shaw, Louis A. (Mrs.)	Peterboro, N. H.
Shencup, Emma Feldbau	m (Mrs.)
	New York City

Shepherd, Mary Swope Passaic, N. J. Sherman, A. Marguerite Mt. Vernon, N. Y. Sievers, Sophie Elisabeth Yonkers, N. Y. Silver, Emma Shanghai, China Singer, Clara Cleveland, Ohio Singh, Joseph N. Bombay, India Slauson, Nina Ella New York City Slack, Florence R. Perry, N. Y. Sloane, Boyd Lincoln West Paterson, N. J. Smith, Bertha Yonkers, N. Y. Waterloo, Iowa Smith, Constance Smith, Maude Winifred New York City Smith, Ruth Helen Hollis Center, Me. Snell, Chester DeForest Canajoharie, N. Y. Solomon, Rebecca New York City Somerville, Irwin Blaine Ridgewood, N. J. Sommerville, Richard Clarke

Moorefield, W. Va. Spaulding, Jean Electa Groton, N. Y. Speckel, Marguerite Amelie New York City Speiden, Evelyn Washington, D. C. Sprowles, Alberta Blanche Philadelphia, Pa. Stafford, Grace Louise Vineland, N. J. Steele, Ellen Woodhull Hillsboro, Ohio Sterling, Grace Ruby Bridgeport, Conn. New York City Stephenson, Julia Mary Stewart, Mary Elizabeth, New Wilmington, Pa. New York City Stocker, Clara

Stockwell, Anne Belle Northampton, Mass. Stratton, Mary S. Amityville, N. Y. Strong, Marie J. New York City Sulis, Agatha Layton Digby, Nova Scotia, Canada Tanenbaum, Estelle P. Bayonne, N. J. Nanchang, China Tang, Ilien Joyce Taylor, Madeline Dow Newark, N. J. Teng, Tsin Ying Peking, China Tennant, Robert Alexander Midland, Md. Thompson, Alta Emeline New York City Thornton, Claytie Montgomery, Ala. Tompkins, Kathrin New York City Trounce, Anora Kate New York City Troxell, Eleanor Chicago, Ill. Tufts, Dorinda Winifred New York City Uyeda, Akira Shinkichi Sanuki, Japan Van Valkenburg, Mazie New York City Natchitoches, La. Varnado, Dean Edwards Vaughn, Ada Mayham Richmondville, N. Y. New York City Virshup, Hyman Wada, Tomi Yamaguchi, Japan Brooklyn, N. Y. Waghorn, Gladys Agnes Yonkers, N. Y Waldbillig, Margaret Walsh, Hannah Bertha New York City Minneapolis, Minn. Walters, Bonnie Eloise Wash, Eva Flora Portland, Ore. Watson, Gertrude A. Painted Post, N. Y. Watson, LuElla Elizabeth Montevideo, Minn. Weatherby, Grace Kingsley Hackensack, N. J. Weisenburg, Anna Isabel Paoli, Pa. Welch, Hazel Janesville, Wis. Wells, Florence New York City Wilson, N. C. Wells, Rosa King Welsh, Margaret Elizabeth New York City West, Anna May Shanghai, China Pleasant Hill, Ohio West, Daniel Wheaton, Alice Lillian Gloversville, N. Y. Whipple, Grace Louise Keene, N. H. White, Mary Catherine Richmond, Ky. Whitehurst, Nan Averette Dublin, Ga.

Torrington, Conn. Whitemna, Edith Jane Whiting, Annie Adella Toledo, Ontario Whitlock, Sarah Oliver New Brunswick, N. J. Whitson, Ethel M. Philadelphia, Pa. Wieand, Ella Margaret Hackensack, N. J. Wiesmann, Jules Plainfield, N. J. St. Johnsbury, Vt. Wilde, Eva Louise Wiley, Ethel Anderson New Park, Pa. Willcox, Lucie Vivian New York City Willoughby, Harriet New York City Pelham, N. Y. Wilson, Emily Newcomb Wilson, Ethel Los Angeles, Cal. Wilson, Lois Belle Grand Rapids, Mich. Winter, Dorothy Ellen New York City Wise, Margaret Cecil Elizabeth, N. J. Wixon, Adelaide Neay Ossining, N. Y. Wollung, Lydia Augusta Mattoon, Ill. Woelflen, Irene Margaret Lewiston, Idaho

Wong, Nellie Chov New York City Wood, Elizabeth Teas (Mrs.) Brooklyn, N. Y. Woolf, Katherine Marie New York City Wright, Ida Rosanna, Briarcliff Manor, N. Y. Wright, Lula Esther New York City Wylie, Irene E. Burtt New York City A.M., Indiana, 1908; A.B., Indiana, 1906 Yawger, Florence Leonia, N. J. Young, Emilie Louise Woodrigde, N. J. Zabriskie, Susan Romevn Newagen, Me. Zachry, Caroline Beaumont New York City Zeidman, Lena Kate New York City Ziegenhain, Wilhelmina M. New York City Zobel, Emilie A. Terre Haute, Ind. Zyve, David G. Warsaw, Poland

SCHOOL OF PRACTICAL ARTS SENIORS—CLASS OF 1919

Adams, Helen
Albrecht, Charlotte
Alden, Esther Hyde
Aldous, Bertha Leishear
Aldrich, Mary Edith
Anderson, Amy Rachael

Oberlin, Ohio
Los Angeles, Cal.
Philadelphia, Pa.
Passaic, N. J.
Riverhead, L. I.

Clarksburg, W. Va. Applegate, Helen Gould Lakewood, N. J. Applegate, Mildred Brooklyn, N. Y. Arbogast, Mary Gertrude Pittsburgh, Pa. Arnold, Henrietta A. Brooklyn, N. Y. Baker, Dorothea Edwards Jamestown, N. Y. Baldwin, Isabel Cherry Jacksonville, Ill. Banks, Anna Katherine Denton, Tex. Barber, Genevieve Thompson Pownal, Vt. Barnard, Vivia Gray New York City Bates, Minnie Belle Denton, Tex. Bedell, LuElla E. Richmond Hill, N. Y. Bennett, Virginia Caswell Danville, Ky. Bernholz, Emily M. New York City Best, Mary Bradley Fayette, Mo. Bettenhausen, Verona Elizabeth Hazelton, Pa. Biber, Charlotte Brooklyn, N. Y. Bishop, Helen Quimby, Bridge Hampton, N. Y. Booth, Edna A. Kingston, Ont., Canada Breadon, Grace Olean, N. Y. Brownell, Bertha Valentine, Fall River, Mass. Buck, Beatrice Imogene New York City Burdick, Harriet Esther Wilkes-Barre, Pa. New York City Burns, Suzette Bushell, Carrie Grace East Orange, N. J. Caldwell, Louise Campbellsville, Ky. East Orange, N. J. Canfield, Gertrude Cecil Carlock, Adelaide Lindsley

Hasbrouck Heights, N. J.
Case, Adeline Lucille Jefferson, Ohio
Chambers, Ulysses Garrison Baltimore, Md.
Chaplin, Eunice Rock Hill, S. C.
Chew, Eleanor Muchmore
Christal, Rose Virginia

Christal Terrace, Santa Cruz, Cal.

Clark, Anna L. K.	Plattsburg, N. Y.
Cobb, Leila May	Scranton, Pa.
Cohen, Evelyn	Palisade, N. J.
Collamore, Marion	New York City
Condon, Alberta Louise	Greeley, Col.
Conover, Ethel Grace, Bran	npton Ont., Canada
Couse, Emily Winsor	Asbury Park, N. J.
Crawford, Catherine	Pittsburgh, Pa.
Crocheron, Margaret Glady	ys

Mt. Vernon, N. Y. Newark, N. J. Croselmire, Neva S. Crounse, Dorothy Glen Ellyn, Ill. Crowell, Charlotte Lois Erie, Pa. Cutler, Harriet Bulkley Mt. Hermon, Mass. Davis, Bertha Corvallis, Ore. Deyo, Charlotte Mabel Rochester, N. Y. d'Humy, Elena Theodora Englewood, N. J. Dement, Lucia Williams New York City DeWitt, Katharine Eliza Jersey City, N. J. Dillon, Marie Kathryn Holyoke, Mass. Dodson, Phyllis Olga Berwick, Pa. Dugan, Mary D. Norristown, Pa. Duram, Margaret Irene New York City Eckert, Edna Margaret Newark, N. J. Edson, Caroline Moore Scottsville, N. Y. New York City Ehrlich, Phillip

Eisenbrandt, Alice Alberta

Hawkinson, Nellie Xenia

Mt. Washington, Md. Eldred, Irene Revers New York City Ellert, John Francis New York City Endress, Marguerite Salls Brooklyn, N. Y. Evans, Florence Palmer York, Pa. New York City Fender, Constance Stone Fitch, Nataile K. Upper Montclair, N. J. Fopeano, Helena J. Abington, Va. Frame, Elsa Louise Toledo, Ohio Franklin, Kate Mann Flushing, L. I. Francis, Haydee Elinor Taylor, Pa. Freimuth, Edna Duluth, Minn. Fuller, Ruth H. Jefferson, N. Y. Fulton, Agnes Fraser Yonkers, N. Y. Garesche, Lala Seron St. Louis, Mo. Garrison, Emma Pauline Waterloo, N. Y. Garrison, Olive Yonkers, N. Y. Gilbert, Josephine H. Glencoe, Minn. Gleason, Julia Kansas City, Mo. Golden, Mary Frances Marlinton, W. Va. Goodell, Mary Elizabeth Syracuse, N. Y. Goodman, Stella H. V. New York City Gorman, Anna Gertrude Holyoke, Mass. Grav. Hattie Dunkin Laurens, S. C. Gray, Mabel Lucile Lima, N. Y. Greenwood, Lydia Howard Lawrence, Mass. Guernsey, Eupheme I. Yonkers, N. Y. Hale, Elmira New York City Hall, Laura Margaret Concord Junction, Mass. Hamilton, Fave Ileene Newark, N. J. Harris, Edith Hearn New Milford, Conn.

Webster, Mass.

Hawley, Edith Adeline Heinly, Mary Jane Heins, John P. Hendry, Elizabeth Higgins, Olivia Cameron Hill, Ada Winifred Hill, Ethel Mae Hopper, Arthur Frederick Hopping, Carol Marguerite

Bridgehampton, L. I. Horton, Eudora Belle Middletown, N. Y. Huff, Sara B. Huie, Caroline Alida Hussey, Marguerite Mallard, Philadelphia, Pa. Hutchins, Margaret Hyman, Pauline Beatrice Immel, Marian von K. Jacob, Edna H. Jacobs, Beryl Martin (Mrs.) Jaglowski, Elizabeth A. James, Mae Jeremiassen, Thyra Magdalenen Jessup, Helen Harris Johnson, Katharine Barber Johnson, Mary Anna Jones, Curtis Jones, Dorothy Malcolm Kalb, Abraham L. Keefe, Grace Maria Kellog, Emily Chapin King, Marie Gunther Klaer, Bertha Klepper, Ruth Maud La Ganke, Florence May Leedom, Mabel H. Leichliter, Carrie S. Leighton, Frances Howe Leonard, Clare A. Lewis, Sarah Louise Long, Jessie Anna MacArthur, Eda McCallum, Amelia Brown McCown, Nellie McElhinny, Caroline Virginia, McGann, May Elizabeth McIntosh, Mildred McLeod, Mary Mills McNeff, Katherine Marker, Beulah Judith Martin, Lillian Annette Martin, Susanna Mavrin, Mary Margaret Maurer, Elsa Mayer, Marion Margaret Meads, Aileen M. Menagh, Anna Taylor Jersey City, N. J. Mendelson, Anna Wharton Michalover, Lillian

Millar, Katharine Saam

Elk City, Kan. York, Pa. New York City Roslindale, Mass. Glen Ridge, N. J. Yonkers, N. Y. Wagoner, Okla. Plainfield, N. J.

New York City

New York City Palmyra, N. Y. Lima, Ohio Pittsburgh, Pa. New York City Easley, S. C. Chicago, Ill. New York City Miami, Fla. New York City Plattsburg, N. Y. Kew Gardens, L. I. Waco, Texas Catskill, N. Y. New York City Springfield, Mass. New York City New York City Milford, Pa. La Plata, Mo. Cleveland, Ohio Dayton, Ohio Trenton, N. J. Hollis, N. H. East Orange, N. J. New York City Brooklyn, N. Y. New York City Brooklyn, N. Y. Spencer, Iowa New York City Chicago, Ill. Alda, Neb. Kansas City, Mo. Los Angeles, Cal. Los Angeles, Cal. Lexington, Ky. Kerman, Cal. Zumbrota, Minn. New York City Corona, N. Y. New York City

New York City

Brooklyn, N. Y.

Asbury Park, N. J.

New York City Miller, Frances Weston Miller, Norma Maynard Burlington, Vt. Minami, Takeo Tokyo, Japan Mitchell, Margaret Agnes New York City Molstad, Ragna Spring Valley, Minn. Moress, Elsie Jeanette White Plains, N. Y. Morey, Helen H. New York City Morris, Miriam E. New York City Murray, Alice Winton Scranton, Pa. Newlands, Ethel M. Buffalo, N. Y. Nielsen, Ida Helena Selma, Cal. Oettinger, Margaret Louise Scranton, Pa. Olson, Edythe L. Minneapolis, Minn. Ormsby, Sarah Sinclair Woodstock, Ill. Page. Alyce Oliver Marietta, N. C. Pazandak, Marie A. Minneapolis, Minn. Peck, Flora Estelle Syracuse, N. Y. Perkins, Marcia Knoxville, Tenn. Peters, Alice R. (Mrs.) New York City Potter, Edith M. Winona, Minn. Pritchett, Mary Montgomery

Huntsville, Texas Pulver, Kathryn E. Pine Plains, N. Y. Randall, Edna M. Dowagiac, Mich. Rasey, Dorothy Holyoke, Mass. Rawson, Adelaide Ridgewood, N. J. Reed, Mildred Anne Whitewater, Wis. Reigart, Irno Sarah York, Pa. Richie, Mary J. Brooklyn, N. Y. Ridley, Helen Elizabeth New York City Riley, Ruth Elizabeth New York City Roberts, Jane Lukens Philadelphia, Pa. Robinson, Ruth New York City Robson, Helen Kitchel Detroit, Mich. Dayton, Ohio Roetter, Janet Elizabeth Rood, Elizabeth Crossett Pleasantville, N. Y. Russell, Earle Stone Gorham, Mass. Russell, Helen Hack Morgantown, W. Va. Russell, Harriett Frances Lincoln, Ill. Stratford, Conn. Ryan, Ellen M. Savery, Emerson Blaine New York City Schang, Pauline Wurster (Mrs.), New York City Schneidau, Ingeborg H. Stockholm, Sweden Schuman, Clyde Beatrice Savannah, Ga. Scoby, Vesta Nina North Tonawanda, N. Y. Scott, Harry Alexander Parsons, Kan. Shannon, Elizabeth Winston Sedalia, Mo. Shaw, Beatrice E. New York City Sherwin, Katherine Isabel Valhalla, N. Y. Shipman, Dorothy New York City Simmons, Nellie A. New York City Simson, Cornelia Lucinda, Seneca Falls, N. Y. Sirginson, Ella New York City Smith, Lula Edna Eldorado Springs, Mo. Smith, Miriam Louise Englewood, N. J. Windsor, N. Y. Sornberger, Lulu Irene Sowter, Helen Great Falls, Mont. Woodcliff, N. J. Sterz, Emily Clara Stewart, Lucile Mt. Vernon. N. Y. Stone, Marion Cornelia Southington, Conn. Denton, Tex. Storrie, Elizabeth L. Strang, Anna Violet Brooklyn, N. Y. Strange, Ora East Orange, N. J. Swinburne, Susie Peary Hackensack, N. J. Sumner, Lela Holland Arden, N. C. Taylor, Mary Sanford New York City Teeple, Georgia Fletcher Pontiac, Mich. Thompson, Dorothy Grace, Cooperstown, N. Y. Thompson, Hila Rochester, N. Y. Thurston, Flora Martha Toledo, Ohio Tisdale, Doris Harriet New York City Towne, Mildred Porter Jersey City, N. J. Townsend, Helen Curtis Mt. Vernon, N. Y. Tuttle, Jessie Pauline Newark, N. J. Tuttle, Margaret Elizabeth Syracuse, N. Y. Tuttle, Margaret Elmina Madison, S. D. Underwood, Esther Lael Washington, D. C. Underwood, Maud Marilla Denton, Tex. Van Aken, Kathryn Grace Mt. Vernon, N. Y. Van Dyck, Alice Douglas New York City Van Syckle, Edith L. Sussex, N. J. Van Santford, Ethel Gertrude Dumont, N. J. Wadhams, Carol Ann Arbor, Mich. Wagler, Arthur Charles Morris Park, N. Y. Wandell, Minnie Belle Glenbrook, Conn. Ware. Florence E. Elizabeth, N. J. Warner, Eleanor Riverhead, N. Y. Warren, Ruth Davenport Washington, D. C. Medina, N. Y. Waters, Florence Linwood Watts, Frances Elizabeth Glen Ridge, N. J. Weaver, Minnie Estel Weaverville, N. C. Webster, Orpha Marie Hines, Wis. Wells, Eleanor Frances New York City Wesley, Mary Buffalo, N. Y. White, Catherine Fresno, Cal. Wilcox, Fay Billings, Mont. Willard, Florence Passaic, N. J. New York City Williams, Grace Dorothy Willson, Mildred Bernice Jamestown, N. Y. Winslow, Geneva Jean New York City Witt, Ruth Flushing, L. I. Wittner, Helen Dorothea Brooklyn, N. Y. Wolff, Lillian New York City Wood, Bessie Stanley Athens, Ga. Wright, Byrdee Bowen Memphis, Tenn. Wyatt, Leta Alberta Salina, Kan. Yen, Richard Chikai Tientsin City, China Norwich, Conn. Zabriskie, Alice Mabel

JUNIORS-CLASS OF 1920

JOINZONG CENTER	0 01 1910
Abrams, Miriam	Brunswick, Ga.
Adair, Mildred Labaw	Bernardsville, N. J.
Adams, Susan	Springfield, Mass.
Adams, Harold Joseph	Lodi, N. J.
Andrews, Phyllis Westover	Brooklyn, N. Y.
Angell, Marion Janette	New Rochelle, N. Y.
Babb, Laura Virginia	New York City
Barber, Mary Isabel	New York City

Barlow, Alice W. New York City
Baskette, Saidee Ballentine (Mrs.)
Nashville, Tenn.
Beam, Mildred Esther Hartsdale, N. Y.

Beam, Mildred Esther Hartsdale, N. Y. Beane, Marion Martha Newark, N. J. Beedenbender, Harry Leonard West Fort Lee, N. J.

Beltz, Genevieve Sara Pittsburgh, Pa. White Plains, N. Y. Berges, Cecelia Ruth Berges, Marion Louise White Plains, N. Y. Bergmann, Elsie E. Brooklyn, N. Y. New York City Berliner, Elsie Best, Virginia Price Fayette, Mo. Bigley, Kathrine Helena New Orleans, La. Bilhuber, Gertrude Maywood, N. J. Blaustein, Fannie Baltimore, Md. Fall River, Mass. Bliss, Carolyn Hervey Blumstein, Juliet Fay New York City Bollin, Elsa E. J. Newark, N. J. Bracken, Esther Paoli, Pa. Brackett, Esther Eunice (Mrs.) New York City Brauer, Florence Hazel New York City Briusmade, Dora F. Van R. Bridgeport, Conn. Brown, Elizabeth M. Stroudsburg, Pa. Brown, Harriet Maxwell Williamsport, Pa. Bryant, Indra Canton, Ohio Buckley, Mary Margaret South Bend, Ind. New York City Burnett, Edith Byrne, Stasia M. St. Louis, Mo. Cannon, Elizabeth Honora Greenwood, S. C. Carmichael, May E. Dillon, S. C. Carrison, Elizabeth Camden, S. C. Carter, Helen Louise Montreal, Canada Chung, Waiha Canton, China Churton, Ethel Binghamton, N. Y. Clark, Lydia New York City Clark, Winifred Mary Peru, N. Y. Coe, Mildred Woolacott Westfield, N. J. Cohen, Constance M. Far Rockaway, N. Y. Connelly, Ethelyn Ludlow, Pa. Cook, Marvel Clyde Lima, Ohio Cousins, Amy Wade (Mrs.) Corvallis, Mont. Cox, Edith Isabel

Charlottetown, Prince Edward Is., Canada Coxley, Irma Hellen West Roselle, N. Y. Schuylerville, N. Y. Cramer, Calista Ruth Cramer, Esther Minnie Schuvlerville, N. Y. Crampton, Helen Marion New York City Crane, Dorothy Sparrows Point, Md. Croll, Victoria Mt. Vernon, N. Y. Crowell, Charlotte Erie, Pa. Nutley, N. J. Cumming, Helen Marie Currier, Nettie Baltzer, Middleton, Nova Scotia Davenport, Dorothy Darleane Wheaton, Ill. Ramsey, N. J. Davidson, Leora Madeline Davis, Helen East Orange, N. J. Davis, Marguerite Princeton, N. J. Davison, Edith Denney (Mrs.) Cambra, Pa. Dealey, Alice Gilbert Mineral Wells, Texas

Delany, Sarah Louise DeVinney, Laura Lauretta Dill, Elizabeth Anne Dowd, Frances Miner Drew, Donna Margaret Duncan, Bertha A. Durholz, Otto B. DuRocher, Sister Domitilla. Eberlein, Bernice Margaret Eckhardt, Elizabeth Marie Ellenwood, Laura Celeste Elliott, Ruth Erdmann, Martha Emma Ewart, Margaret Fairbanks, Helen Clara Farrell, Mary Cecelia Fendig, Selma Jeanette Ferrin, Nellie Mabel Ferris, Helen Elizabeth Fink, Jennie Louise Flint, Mary Gilmore Folsom, Dorothy Margaret Foster, Katharine Lois Frank, Gertrude Elma French, Irene Marjory Frymir, Alice Willetta Gaines, Ina Garfunkel, Rose Garman, Ellen Mary Garst, Rachel Hartshorne Gerard, Margaret Bryant

Glenn, Miriam Elsie Gignoux, Louise Mumford Glancev, Frances L. Goldfarb, Israel Gorman, Edna Mildred Goode, Eslanda C. Cordoza Gray, Margaret Gray, Marjorie Green, Anna Lisette Greene, Mary Dering Haering, Florence M. Hamrick, Ruth Miller Hann, Dorothy Ross Hann, Helen Emery Hankemeyer, Helen May Hart, Eva Sutherland Harwell, Patti Turner Haydock, Emily Gross Hayes, Marjorie Hebel, Frances Marion Heckman, Albert William Herzog, Gertrude Elizabeth Himoff, Lillian Hofford, Marian Katherine Hotchkiss, Alice Hughes, Regina Marie

Hulme, Hannah Catherine

Raleigh, N. C. Butler, Ind. Harrisburg, Pa. Madison, Conn. Highland Park, Ill. Toronto, Canada Paterson, N. J. Rochester, Minn. Cleveland, Ohio Folsom, N. J. Plattsburg, N. Y. White Plains, N. Y. Verdon. S. C. Plainfield, N. J. Yonkers, N. Y. Oswego, N. Y. Brunswick, Ga. Wilmore, Kan. Port Chester, N. Y. Utica. N. Y. Farmington, Me. Piermont, N. Y. Utica, N. Y. New York City Honeoye Falls, N. Y. Williamsport, Pa. Elberton, Ga. New York City New York City Cincinnati, Ohio

South Norwalk, Conn. West Creek, N. J. New York City Elona, Wash. Brooklyn, N. Y. Bridgeport, Conn. New York City Buffalo, N. Y. Whitewater, Wis. New York City Salmon, Idaho Cleveland, Ohio Anderson, Ind. Ridgewood, N. J. Ridgewood, N. J. Hartford, Conn. Lawton, Okla. New York City Ridley Park, Pa. Hillsdale, Mich. Aledo, Ill. Meadville, Pa. Tyronne, Pa. New York City Dallas, Tex. New York City Paterson, N. J.

Paterson, N. J.

Hunt, Iva Dorothy Barnesville, Ohio Huntington, Eleanor Thelma Mt. Vernon, N. Y. Hutzel, Mathilda Emma Ann Arbor, Mich. Jackson, Kathryn Ann Buffalo, N. Y. Janes, Martha B. New York City Jarrell, Ada Joe Temple, Tex. Jarrett, Ida Staten Island, N. Y. Jefferson, Margaret Guthrie Louisville, Ky. Jenkins, Anna Lisle Ottawa, Ohio Joachim, Helen Magdaline Athens, Pa. Johnson, Leonora Jersey City, N. J. Johnson, Mary Anna Kew Gardens, L. I. Johnson, Mary E. Carthage, N. Y. Jones, Ann Walker Carter New York City Jones, Leata Adeline Minden, Neb. Joyce, Margaret Cecelia Paterson, N. J. Scranton, Pa. Kaufhold, Esther Madeline Kaufman, Rosetta Charlotte, New York City Kerr, Sara Camp Crook, S. D. King, Margaret Montclair, N. J. Kistler, Mary Lou Colorado Springs, Col. Kliatshco, Alexandra Gordon, New York City Knight, Marjorie Blake Willimantic, Conn. Clarksburg, W. Va. Knox, Irene Virginia Korn, Helen New York City Kosower, Thelma Brooklyn, N. Y. Krause, Lydia Fairfax New York City Krauter, Edith Bell Glen Ridge, N. J. Lahiff, Ellen Geraldine New York City Lautz, Amalia Elizabeth Buffalo, N. Y. Larche, Mary Alice Monroe, La. Lee, Eleanor Graham Millar (Mrs.) New York City

Leonard, Mildred Henrietta

Woodcliff-on-Hudson, N. J.
Lewis, Marjorie Louise Bay City, Mich.
Lingg, Elsa Westfield, N. J.
Livingston, Elsie Englewood, N. J.
Lyman, Dorothy Allen Upper Montclair, N. J.
McCorry, Margaret Mercedes, Brooklyn, N. Y.
McGill, Laura Gladys Lizella, Ga.
McNally, Frances Maud

Fredericton, New Brunswick, Canada MacPherson, Jean Harmon LeRoy, N. Y. Maplesden, Gwendolyn C. New York City Marshall, Mildred Louise, West Hoboken, N. J. Martin, Carol Lisbeth Boscobel, Wis. Martin, Susanna Kerman, Col. Mason, Ruth Evelyn Cleveland, Ohio Mather, Ana Isabel Tweed, Ontario, Canada Mather, Stella New York City Matthews, Mary Helen Johnstown, Pa. New York City Matthews, Ruth Elizabeth Mier, Meta Eugenia St. Louis, Mo. Beatrice, Neb. Miller, Julia B. Morton, Grace Margaret New York City Moody, Claire Jeanette Canton, Pa. Muessen, Josephine V. Woodmere, L. I. Mullen, Mary Ellen Cheltenham, Pa.

Myers, Hazel Sylvia, Kan. Needham, Pauline Huffine (Mrs.)

New York City Neth, Clara Bidwell Tarrytown, N. Y. Neumann, Beatrix Hazel New York City Neurad, Jeanette A. New York City Cincinnati, Ohio Newburgh, Louise Virginia Noble, Mary Abington, Pa. North, Dorothy Upper Montclair, N. J. Oppenheimer, Elsa New York City Padgett, Ina Ocilla, Ga. Page, Charlotte Palen Athens, Pa. Passmore, Sara Florence Mendenhall, Pa. Peabody, Elizabeth Barrett White Plains, N.Y. Pearce, Dorothy Shephard Manasquan, N. J. Pedlar, William Arthur Brooklyn, N. Y. Pelton, Marion Akron, Ohio Plager, Morris New York City Platt, Annette New York City Potter, Sarah Elsie Henry, Ill. Powers, Lila Katherine Bristol, Tenn. Powers, Mary Elizabeth Bristol, Tenn. Pratt, Gertrude Kincaid North Adams, Mass. Pribnow, Henriette Anna Marie Mellen, Wis. Price, Helen Hope Cleveland, Ohio Prigge, Lillian A. Jersey City, N. J. Arizona, La. Pryor, Daisy DeBet Quintard, Dorothy Stamford, Conn. Raymond, Robin Young (Mrs.) New York City Redfern, Mabel Lillian Brooklyn, N. Y. Remick, Lola Margaret Ashtabula, Ohio Rennie, Helen Allan Toronto, Ont., Canada Requa, Frances Louise Tarrytown, N. Y. Rich, Grace Elizabeth Woobrick, Pa. Ricker, Elizabeth Dunning Boothebay Harbor, Me.

Riddick, Mary Alice Petersburg, Va. Hillsdale, Mich. Rigden, Elizabeth Josephine Roberts, Dorothy Mather Crestwood, N. Y. Robertson, Helen Elizabeth Paterson, N. J. Rock, Joan Margaret Cleveland, Ohio Roe. Grace Wicks Port Chester, N. Y. Buffalo, N. Y. Rogers, Edith A. Rogers, Vera Hawthorn Brooklyn, N. Y. Roman, Leonore New York City Rosenfeld, Jessie New York City Rothenberg, Rose Janet New York City Ruffini, Elsie Erna Cleveland, Ohio Rush, Clara Elizabeth Elkhart, Ind. Sale, Annie Elizabeth Danburg, Ga. Wichita Falls, Tex. Sanders, Loraine Sasse, Sylvia Dalton, Mo. New York City Scanlan, Jeanne M. New York City Schang, Frances Mercedes Schoening, Elsa B. Trenton, N. J. New York City Schopp, Ethel Josephine Scott, Lydia Mary New York City Sease, Mamie Skecut (Mrs.) New York City Shafer, Mary Sherman Manito, Ill.

Shapcott, Edith Martha Co	olorado Springs, Col.		
Sheerer, Rebekah Cooper	Greensburg, Pa.		
Sheffel, Florence Louise	New York City		
Shellabarger, Mary Elizabe	th Moffat, Colo.		
Shofner, Inez	Brewton, Ala.		
Simmons, Nellie Agnes	Sherburne, N. Y.		
Simons, Mary Elizabeth	Swarthmore, Pa.		
Simpson, Dorothy Maude	York Harbor, Me.		
Sims, Mabel Matilda	Montclair, N. J.		
Singer, Augusta Norma	New York City		
Smith, Margaret Thomas	Lansford, Pa.		
Spilsbury, Beulah Gybbon	Brooklyn, N. Y.		
Stiebeling, Hazel Katherine	Latty, Ohio		
Stein, Emily	Newark, N. J.		
Stern, Cora M.	New York City		
Stetson, Elizabeth Silliman	Washington, D. C.		
Stockton, Helen Isabella	New York City		
Stoltz, Elsie Oro	Visalia, Cal.		
Stuart, Frances Gail	Schoolcraft, Mich.		
Stutz, Henry Maurice	Brooklyn, N. Y.		
Swan, Edith Estelle	Newark, N. J.		
Swift, Josephine	Fulton House, Pa.		
Taft, Ruth C.	Brooklyn, N. Y.		
Tan Ditter, Stella	New York City		
Taylor, Clara Mae	Vineland, N. J.		
Taylor, Margaret Samuels	Scranton, Pa.		
Thompson, Blanche Jenning	gs Geneseo, N. Y.		
Thompson, Fanny Jane	Jamestown, N. Y.		
Thompson, Harold Starr	Fulton, N. Y.		
Tompkins, Sarah VanHorn			
Atlan	tic Highlands, N. J.		
Troug Holon Amondo	Cooks Follo N V		

Atlantic Highlands, N. J.
Treyz, Helen Amanda Cooks Falls, N. Y.
Troy, Julia Corinne Centreville, Md.
Valentine, Miriam Wells Bennington, Vt.
Vanderburgh, Eleanor May

Hastings-on-Hudson, N. Y. Vickery, Margaret Ipswich, Mass. Vincent, Dorothy Danville, Pa. Wager, Jean Livingstone Troy, N. Y. Walker, Mary Burnette Buffalo, N. Y. Warner, Mona Lovell River Falls, Wis. Waterbury, Madeleine Skaneatelis, N. Y. Watkins, Grace Vida Indian Spring, Ga. Weeks, Margaret Watson

Nova Scotia, Canada White, Mabel Greenwood Milwaukee, Wis. White, Margaret J. Southampton, N. Y. Widder, Mabel Mt. Vernon, N. Y. Williams, Marjorie Olive Scranton, Pa. Williams, Ruth Fallie Mankato, Minn. Wilson, Louise B. Brooklyn, N. Y. Winckler, Ruth Bridge Asbury Park, N. Y. Yost, Margaret Katherine Little Rock, Ark.

SOPHOMORES—CLASS OF 1921

Allinson, Zella
Anderson, Kate Bogue
Baeza, Madeline A.
Ballantyne, Mary Ethelwyn
Aww York City
New York City
Toronto, Canada

Barnett, Marion	New York City
Bartley, Marie Louise	New Rochelle, N. Y.
Baxter, Isabelle Rankin	New York City
Bayer, Ethel	New York City
Beach, Jane	Brooklyn, N. Y.
Benneyan, Aroos	White Plains, N. Y.
Blakeman, Gladys	Mt. Vernon, N. Y.
Blewett, Margaret Mary	Jamestown, N. D.
Blount, Lucy Morton	New York City
Bluss, Marie K.	

Irvington-on-the-Hudson, N. Y.
Bosak, Josephine Margaret
Bowler, Elizabeth
Brainerd, Ruth Marie
Briggs, Margaret Shennan
Brough, Florence Elizabeth

Irvington-on-the-Hudson, N. Y.
Scranton, Pa.

Hammondsport, N. Y.
Burdett, Evelyn East Orange, N. J.
Carroll, Kathleen Gardnir

Colorado Springs, Col. Casin, Rose M. (Mrs.) New York City New York City Chinn, May Edward Clark, Helen Brooklyn, N. Y. Corbin, Emeline Laura Bainbridge, N. Y. Crumley, Rachel L. Shelton, Neb. Dahnke, Marye Union City, Tenn. Dailey, Effie Lylia East Orange, N. J. de Roche, Esther Passaic, N. J. Diefendorf, Dorothy Louise, New Haven, Conn. Dimmick, Ann Eleanor Scranton, Pa. Donovan, Mary Elizabeth New York City Drummond, Louise Riverton, Wyo. Dugan, Rosamond Norristown, Pa. Watertown, N. Y. Elitharp, Marie Elliott, Jessie Gardner New York City Ellis, Marion Yonkers, N. Y. Esser, Anne Estelle Yonkers, N. Y. Evans, Clara New York City Faber, Alice Gertrude

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Denton, Tex.

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Gibbs, Clara Van Ness	Dunkirk, N. Y.
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Gillette, Maude M.	Shortsville, N. Y.
Gilliss, Jean David	
Char	tham, N. B., Canada
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Goddard, Naomi	Hackensack, N. J.
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G	Frand Rapids, Mich.
Hortz Moras Agnes	Logonoport Ind

George, Allie

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Hayward, Frances	Boston, Mass.
Heelan, Elsie May	New York City
Hellstrom, Zitelle	Salt Lake City, Utah
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Henk, Robert Leedom	Stamford, Conn.
Herbert, Myrta Estelle	Los Angeles, Cal.
Hiers, Elizabeth	New York City
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Hutcheson, Martha Henrietta
Warrenpoint, Ireland
Hutchins, Margaret
Jacobsen, Jennie Charlotte
Jacobson, Amanda
Jahn, Henrietta Maria
James, Eunice
Warrenpoint, Ireland
Warrenpoint, Ireland
Warrenpoint, Ireland
Palmyra, N. Y.
Willmette, Ill.
New York City
Passaic, N. J.
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	s-on-Hudson, N. Y.	Schmieg, Frieda M.	Elmhurst, L. I.
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Sweeney, Anna Maria	Greenfield, Mass.
Tan, Cesarea	Manila, Philippines
Taylor, George Margaretta	Demopolis, Ala.
Taylor, Jane Bliss	New York City
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Terhune, Lorraine Virginia	

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Van Cleve, Ruth
Vanderburgh, Eleanor May

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Graduate students:	
Candidates for the degrees of Doctor of Philosophy, Master of Arts, Master of	
Science, and the Teachers College diploma, major in:	
Administration of Education	76
Educational Sociology	12
Elementary Education	41
History of Education	41
Kindergarten Education	
Philosophy of Education	17
Psychology of Education	10
Religious Education	34
Rural Education	
Secondary Education	27
Vocational Education	
Biology	9
English	
	50
Geography	1
History	30
Latin	4
Mathematics	34
Modern Language	18
Physical Science	
Household Arts	70
Fine Arts	23
Industrial Arts	12
Music]
Nursing and Health	(
Physical Education	I
Unclassified Graduate Students	130
I. Undergraduate students: Candidates for the degree of Bachelor of Science and the Teachers College Diploma:	700
Unclassified in Education	504
Seniors in Practical Arts	251
Juniors in Practical Arts	262
Sophomores in Practical Arts	132
Freshmen in Practical Arts	130
Unclassified in Practical Arts	384
	30.
1.6	1,663
I. Summary:	2 26
	2,363
Additional matriculated students both schools, Summer Session, 1918	
Matriculated students from other parts of the University	281
Total matriculated students, Teachers College, from July 1, 1918	4,112

(In addition to the above there are 1,228 students in the Horace Mann Schools, 625 extension students in the School of Practical Arts, and 1,995 non-matriculated students in the Summer Session of 1918.)







